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REGIONAL VARIATIONS IN URBANISATION AND URBAN-RURAL RELATIONSHIPS



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1

Scope of Theme and Salient Features in the Process of Urbanisation

The study attempts to analyse the existing pattern of spatial distribution of urbanisation in India with a focus to emphasize the determining factors and highlight the possible trends in future.

Any fruitful discussion about regional variations in urbanisation in India, a country so diverse in its physical, socio-economic and politico-historical facets, must relate to its overall human settlements structure. It is common knowledge that the history of human settlements development in all countries underscores the nexus between the location of settlements and their clustering, growth etc. and the availability of natural resources. But with the advent of easy and quicker means of transportation and the emergences of economic and political power, significant changes in the traditional settlement patterns are seen. Thus, the spatial and temporal patterns of variations in urbanisation in India, and for that matter, the distribution of urban places, their growth rates and functional interlinks are largely the manifestations of the emergence of such economic and political power enclaves and the transportation systems which determined the scale and variety of exploitation of resources. On the other hand, in the rural areas also, the emerging conditions are creating enclaves of power which further alienate the poor from the rural development process. The relations of economic exploitation and social oppression between the communities have not sharpened over years. It is mainly due to the increasing imbalance within the cultivating classes, the increasing marginalisation of the poor and their separation from their living resources coupled with the upward mobility of the middle and top layers and their struggle to monopolise economic and political power.

All this has led to the break of traditional village order and its interlinks on the one hand, and on the other, to push out the rural to the urban areas in destitution and seeking for basic sustenance. Slow growth

of non-agricultural activities even allied agricultural activities in rural areas has further contributed to the process of influx to urban areas. On the urban front slow ancilarisation of industries, and slow growth of organised tertiary occupations have put the urban economy in severe strain with the overload of a economically marginal population which constitutes at places more than half of the total urban population.

The net result is while the steady influx into the urban areas is swelling them beyond viable proportions, the urban centres are becoming the centres of scarcity. Dynamism in urban economics particularly the distribution of wealth and income, in general are all negating the process of healthy and desirable urbanisation. Added to this replication of western unaffordable norms and standards in urban planning and adoption of westernised ways of life further squeeze the resource scarcity conditions. National level resources also are awfully scarce to bring about radical changes in the current rural to urban migration streams atleast for the next 2 or 3 decades. And this period is crucial. *Planning in scarcity* has to be the key and optimization in it has to be based on sharing the scarcity. Creating a process of urbanisation which ensures a more equitable distribution of benefits and a desirable minimum quality of life for the majority cannot be overemphasized. This perhaps needs a total new look at all facets of the urbanisation process and creating of new attitudes and values towards urban life and also new systems of institutions.

Urbanisation as a natural process is a determinant as well as consequence of economic development. But urbanisation is caused and manifested in other different ways which also can, in a sense, be called processes. *Urbanisation can be deliberately induced* by adopting a particular variety and spatial mix of development programmes. Development programmes can be planned to cater to different aims

contrastingly opposite to each other. For example, a development programme package can be designed either to stabilize rural population and reduce out-migration or to induce outmigration to urban areas. In reality we find that ineffective planning and implementation of development programmes in India have induced rural to urban migration in undesirable proportions. The resultant urbanisation in this case is not a product of the natural processes of economic development but the product of the development programmes.

Yet, another process one sees in India which can be termed as the *ad hoc* process. In other words, urbanisation is caused on virgin areas due to one time ad hoc decisions taken at the national level. The common example in India is the locational decisions taken for establishing large industrial complexes in backward areas. Location of all major steel mill projects, cement & fertilizer also can be categorised under this. Though originally planned to grow and act as catalytic centres of urbanisation, most of these at best even after two decades of inception exist as small islands of urban growth surrounded by sprawling economically backward rural areas. Such islands reiterate the fact that spread and growth of urbanisation depends more on the economic dynamism of the hinterland than on the catalytic centre.

Another process different from any of the above mentioned three processes can be called as the *political process*. This entails arbitrary extension of boundaries of the existing urban areas mainly to achieve political ends. In a democratic setup as ours such shifts of urban boundaries may be directly related to redefining electoral vote zones to someones advantage. Such a process only results in inclusion of large tracts of rural areas within urban limits for the purpose of only administration and enumeration as urban. Rewa, Katni, Dewas are a few examples in M.P. where extension of their urban boundaries was totally uncalled for and declaring those as municipal corporation areas was arbitrary.

After having traced briefly different processes which have directly affected urbanisation in the country, the following attempt is made to understand the *landmarks of the urban structure through history*. Through history when one traces the emergence and location of nodes and centres of economic and political power in India, some interesting patterns are seen to have existed during the pre-British period. Traces of the spatial structure which was shaped by these nodes and focal points almost four centuries before are still seen significantly, within the ambit of their influence zones. The British colonial era with its exploitative intentions and maritime affinities had a

dominant role to play in shaping the settlement structure in India during the last two centuries. One of the significant resultant was the emergence of the coastal nodes which functioned as the outlets of raw resource and also as the inlets of British made products during the colonial era. We know that almost all these coastal nodes have now grown to be the major urban nodes in India. Their peripheral location and a converging transportation system on them have given them the advantage to influence vast hinterlands. We see through history that these few dominant peripheral nodes alongwith also a small number of smaller inland centres which functioned as the secondary foci of economic and political power dominated the urban structure of India through the nineteenth century. Legacy of such an urban structure has significantly determined and influenced the process of urbanisation even well after the independence.

The colonial urban structure has continued to dominate the distribution pattern of economic and political power in the country and infact the patterns of spatial distribution of urbanisation even today, are to a great extent the product of it. The present trend of growing concentration of urban population and activities in some dominant centres and enclaves can be analysed as the direct consequence of economic and political power prevailing there. As the distribution of economic and political power in the country remains greatly uneven, in contrast to the *dominant enclaves* referred to above, we find large areas of very low level of urbanisation. Growth of very large cities is a concomitant to this. In such a process the traditional order or say equilibria among the human settlements has collapsed into new patterns of urbanisation opposing the metropolis and the village with sharp uneven concentration of population and the available opportunities for better quality of life in the former.

In India, fortunately unlike many other smaller developing countries, primacy in the urban spatial structure is not significantly dominant at the national level. There are already four cities located in different parts of the country which have 5 million or more population and by 1991 three more will have been added. The regional level primacy, however, is high and dominates the urban structure. In the Calcutta region, this dominance is most pronounced and within 800 km. from Calcutta there is not even one city with 1 million population. The case with the Delhi region is almost the same. Though the country has a wide range of urban centres, they show strikingly uneven advantages of growth between them; the larger ones having the better part. Such

as urban settlement system provides the base on which growth trends, unless guided, will make the concentration pattern further uneven.

There are already available a large number of analytical studies to highlight this spatial distribution of urban centres. Overwhelmingly, such studies have focused on the regional spatial distribution patterns and distribution of population within urban centres of different size. Many such studies have added to the common debate on city size and dynamic of growth and by and large have put the pointer on the big in preference to the small.

Spatial distribution of urban population in India at first glance provides an uneven picture, with very wide variations between the high and low level areas.

Clustering or belting of concentration is another clear feature seen. The spatial pattern however, to a considerable extent, is shaped by historical factors. The uneven character of distribution is also expressed in very wide size differentials that exist between the urban centres.

It is interesting to note how far the government policies regarding industrial location and dispersal of investments are influencing the pattern of spatial distribution of urbanisation. The study tries to throw some light on this aspect by analysing the area, concentrations of industrial growth and agricultural development in the country. Future estimates in urbanisation are discussed in context of the emerging trends of spatial variations and the possible future development scenarios.



2

Urbanisation : Spread & Growth Differentials—Some Theoretical Contentions

It may appear from the foregoing discussion that some insights into the size and growth relationship in cities may be worthwhile here before attempting to assess the spatial variations of urbanisation at the sub-national or regional levels. Conventional methods of analysis starting with those of Berry (1961), Moore (1964) McGee (1971) and Mills (1972) which studied the developing countries situations have arrived at different kinds of deductive findings. Kundu (1981) analysing these, states that the group which emphasizes the concept of 'dependent development' says that the higher order cities become the centres of concentration of productive resources & capital, and also the elite class which in turn give impetus for growth. While, on the other hand, the lower order cities, which depend only on the local or regional level economics for sustenance do not have adequate productive resources or capital, and hence, grow much slowly than the higher order cities. The other group led by Berry (1961) finds that urban system in a country shows a pattern which is, by and large, independent of its socio-economic situation and governmental policies. The contention is that there always is achieved overtime an internal order referred to as 'rank size rule' in an urban systems. In well developed and effectively growing urban systems the ratio between the growth of urban population and the increase in the No. of centres is constant overtime. Variations in this order of distribution seen in a country should be considered as a transitional phase leading to achieve a *ranksize distribution of urban centres*. But what is important is not the order in the spatial distribution of urban centres that is likely to come in future but how to plan and guide the urban structure so as to make it effective and to achieve the desirable order in a foreseeable future.

The utility of the above mentioned two theoretical contentions is to drive home the point that a spatial or

temporal analysis of urban growth patterns in India particularly focussing on the regional variations would present scenarios, which may be interpreted in contrasting terms if one followed either of these theoretical contentions as the base. It is a common understanding in many quarters that the present rate of urban growth which is referred to as explosion in India is an undesirable process. Its top heavy *structure is dysfunctional* and the larger cities especially the metrocities are growing at the cost of the smaller ones. Such understandings bear out of the conventional methods of analysis which in their predisposition may appear as fallacious. The result is that the temporal trends of growth of population computed for different size classes of urban centres are significantly exaggerated presenting a very skewed condition. On the other hand, if one follows, for a while, the postulates of the other group which emphasizes the internal logic in the growth of a system, the existing pattern of distribution of urban population in India and its trends do not cause any alarm from the angle of functionality of the urban system. The currently seen wide differentials in the growth rates of the urban centres of different size is a *transitional phenomenon* and it is the resultant of the patterns of concentration of economic and political power which influence the urban system. Overtime when the influencing forces become varied and the relationship between the agricultural production process and industrial development becomes more pronounced, this differential growth rates will tend to stabilize and gravitate towards uniformity amongst the size classes. A trend though slow, is clearly emerging in India since the last decade or so. But from whatever angle one tries to assess the spatial pattern of urbanisation, the desirability of such a pattern has to be judged carefully demanding more detailed empirical investigation.

Urbanisation Process : The Implications for Development

As a result of predominance of economic criteria in development, human settlements especially the urban centres have become the milieu in which the two environments, manmade and natural, come in conflict. Such conflicts are manifest in the societal, physical, economic and even in political senses. In such a process unfortunately, as said earlier the valuable relationship between the natural habitat and the traditionally built settlements has been radically disturbed by haphazard growth. Such a situation is seen in the base of both rural and urban settlements in India and is perhaps very significantly pronounced in the case of the latter.

It is, however, understood that urbanisation as a phenomenon is an integral part of economic development, more precisely of the investment pattern. As a consequence of economic change, urbanisation is a manifestation of agglomeration of activities and the supporting population at places which are markets and production centres of goods, services and employment. With this contention it is logical to assume that spatial variations in the pace and concentration of urbanisation should be positively correlated to the spatial variations in the space and levels of economic development. Therefore, we know that it is not the population size of the urban centres that determines their pace of growth, but it is the dynamism by the economic activities in them and in their regions which is the determinant. Hence, to reduce the existing imbalance in the spatial variation in urbanisation it is perhaps not the shift of activities from the larger cities to smaller cities and to the town which is required. What is required is the strengthening the economic characteristics of the smaller cities and towns more particularly of their hinterlands.

Urbanisation as discussed above is directly related to economic development and modernisation. In this sense it is a determinant as well as a consequence of economic development in general. It is, therefore, characteristic of economic development that certain

activities which require either certain skills, population agglomeration, economic base, fiscal or other infrastructure inputs related to urban areas tend to locate in them or nearer to them. In addition high elasticities of substitution of land and non-land inputs (as opposed to Agriculture) also would lead to urban growth or concentration.

Thus the location of certain economic or other activities in urban areas is complex and is dependent on a host of factors concerned with all sectors of economy. In fact even an increased agricultural activities (or input) may trigger, more concentration of activities related to this agricultural growth in urban areas. For example, in the agriculturally surplus areas like Punjab and Haryana urban growth has shown an increase consequent to locations of activities servicing (or related to) agricultural operations including trade, commerce, banking and support industries.

Thus correlation between per capita income and the levels of urbanisation is too well known and do not need any reaffirmation. But the *per capita income disparities and differentials* between urban and rural areas of the country are a major causative factors for the pattern and type of urban growth that has occurred in the country. Irrespective of the debate over 'Push' and 'Pull' factors that urbanisation studies have generated, there are discernible trends in the spatial distribution and location of urban centres (areas) in the geographical spread of the country.

(a) Urbanisation and Economic Development

Recent studies by the Planning Commission show that the variation in levels of urbanisation* between the states presents generally a declining picture since 1954 as measured by the coefficient of variation, which was 0.45 in 1954, 0.42 in 1961, 0.51 in 1971 to 0.34 in 1981. The accelerated pace of urbanisation in many least urbanised states since 1951 and a

*The coefficient of variation in the levels of urbanisation is taken for levels according to urban population in towns above 20,000.

steady and decreased pace in most urbanised states has narrowed the variation.

In general there is a decline in the rate of growth of rural population and acceleration in the rate of urbanisation. The following table shows that there has been a significant decline in the rates of growth of rural population in the high agriculture productivity states of Punjab and Haryana and moderate decline in the states of Madhya Pradesh and Orissa during the period 1951-81. In Bihar, Rajasthan and Uttar Pradesh it has, however, increased slightly. The urban rural growth differentials (URGD) have significantly increased in 1971-81 in all states particularly in Haryana, Punjab, Andhra Pradesh and Karnataka. In Maharashtra, Gujarat and Tamil Nadu, where urbanisation has been stabilised the trend of URGD was practically stagnant and actually declined in Tamil Nadu.

If we look at the relationship between urbanisation and economic development, the following issues emerge. Analysis of per-capita state domestic product (SDP) at constant 1970-71 prices for 1961, 1971 and 1978-79 which shows Bihar, Orissa and U.P. have very low per capita incomes. These states have also low per capita SDP and interestingly these states have also very low levels of urbanisation. States like Punjab and Haryana almost doubled their per capita SDP during 1951 to 1981. The coefficient variation in per capita income between states has moved from 0.23 in 1961 to 0.26 in 1971 to 0.33 in 1979. Thus while the disparity in per capita SDP increased further during 1961-79 the same for urbanisation presented opposite picture. The coefficient in variation declined from 0.37 to 0.34 to 0.29 for the same years respectively. This may show that there is no obvious direct relationship between the per capita SDP and the level of urbanisation. But it is

STATEWISE GROWTH OF RURAL POPULATION AND URBAN-RURAL GROWTH DIFFERENTIAL (URGD) IN INDIA 1951-81

STATES	Annual rate growth of rural population			URGD		
	1951-61	1961-71	1971-81	1951-61	1961-71	1971-81
Andhra Pradesh	1.46	1.68	1.60	0.01	1.28	2.42
Bihar	1.64	1.78	1.89	2.43	1.93	2.55
Gujarat	2.61	2.29	2.00	-0.76	1.21	1.48
Haryana	2.93	2.78	1.96	0.12	0.31	2.81
Karnataka	2.06	1.93	1.73	-0.37	1.13	2.44
Madhya Pradesh	1.92	2.31	1.77	2.06	1.59	2.78
Maharashtra	2.22	2.03	1.62	-0.27	1.45	1.79
Orissa	1.58	2.03	1.43	4.87	3.19	3.91
Punjab	1.79	1.89	1.53	0.79	0.39	2.14
Rajasthan	2.63	2.32	2.42	-1.58	0.99	2.20
Tamil Nadu	0.81	1.52	1.20	1.25	1.79	1.28
Uttar Pradesh	1.65	1.68	1.81	-0.70	1.03	3.08
West Bengal	2.80	2.37	1.85	0.32	0.16	0.98
India ²	1.89	2.00	1.75	0.48	1.29	2.11

Note : 1. Including all states with a population of 10 million or more in 1971, excluding Kerala and Assam.

2. Including all states except Assam and Jammu and Kashmir.

SOURCE : Task force on Housing and Urban Development, Planning Commission, Govt. of India, September, 1983

not the case, because as we have seen earlier even in very poor states there has been a spurt in urbanisation. This is mainly because of out migration from rural areas in search of employment in urban or industrial areas. This can be called distress migration which adds to the urban population only through a process of accretion.

The per capita value added in factory sector analysis shows that by 1981, Punjab had recorded the maxi-

imum growth, while Uttar Pradesh, Bihar, Orissa and Rajasthan had recorded moderate growths. The coefficient of variation for the per capita value added between states in the factory sector had declined from 0.92 in 1961 to 0.67 in 1971 and to 0.62 in 1978. The disparity had narrowed down. In agriculture productivity, however, on the other hand, there is a continuous increase in disparity of coefficient of variation from 0.30 in 1961 to 0.59 in 1971 and to 0.73 in 1981.

From the above studies it can be concluded that increase in *disparity between the states* in 1961 to 1981 is mostly attributed to stagnation in agriculture productivity in many of the states. At the same time states like Haryana and Punjab showed, tremendous increase in SDP both in agriculture and industrial sectors. Except states like Gujarat, Maharashtra, Tamil-Nadu and West Bengal which marked remarkable growth in industry, other state's SDP increased mainly from the agriculture sector.

Now if we look at the relation between economic development and urbanisation, states which has low SDP like Bihar, Orissa, Uttar Pradesh, Madhya Pradesh and Kerala had also low percentage of Urban population in 1961 and those have continued to remain in the low ebb even in 1981, even though value added in factory sector in them improved moderately. But lately the rate of urbanisation has been very high in these states. This can be attributed more to the increase in industrial development in them, (reflected in per capita value added in industry sector) and stagnation in agriculture. It is particularly the latter which is the main contributing factor which set out large scale out migration from rural areas. On the other extreme is the case of Punjab and Haryana where increase in agriculture productivity kept urbanisation at low till 1971 with high rates of labour absorption in agriculture. But after 1971 saturation in the

PER CAPITA STATE DOMESTIC PRODUCT

States	Per capita State NDP (Constant 1970-71 Prices)		
	1961	1971	1981
(1)	(2)	(3)	(4)
1. Andhra Pradesh	518	586	678
2. Bihar	390	418	438
3. Gujarat	697	845	884
4. Haryana	627	932	1029
5. Karnataka	559	675	723
6. Kerala	471	636	569
7. Madhya Pradesh	472	489	463
8. Maharashtra	769	811	1008
9. Orissa	392	541	514
10. Punjab	760	1067	1308
11. Rajasthan	500	629	591
12. Tamil Nadu	571	616	682
13. Uttar Pradesh	457	493	524
14. West Bengal	758	729	765
Mean	558	676	727
Coefficient of Variation	0.23	0.26	0.33

Notes : 1. 1978-79 data.

Sources : Centre for Monitoring the Indian Economy Basic Statistics Relating to the Indian Economy Vol. II. 1981.

STATEWISE MANUFACTURING AND AGRICULTURAL PRODUCTIVITY 1961-1981

State		Value added in factory Sector (Current Rs. per Capital)			Agricultural Productivity (tons per person)		
		1961	1971	1981	1961 ²	1971 ³	1981 ⁴
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	9	29	74	0.88	0.83	1.06
2.	Bihar	14	31	57	0.71	0.69	0.67
3.	Gujarat	52	108	245	0.59	0.94	0.85
4.	Haryana	—	70	169	—	2.77	2.91
5.	Karnataka	14	62	107	0.82	1.06	1.13
6.	Kerala	17	42	93	0.60	0.50	0.65
7.	Madhya Pradesh	8	27	68	1.24	1.26	0.98
8.	Maharashtra	69	167	324	0.92	0.65	1.17
9.	Orissa	6	27	62	0.90	0.96	0.98
10.	Punjab	46	52	136	1.73 ⁶	3.07	4.36
11.	Rajasthan	5	26	56	1.10	1.44	1.05
12.	Tamil Nadu	24	75	166	0.90	0.98	1.07
13.	Uttar Pradesh	9	24	47	0.85	0.99	0.99
14.	West Bengal	60	97	173	0.92	1.11	1.04
Mean		23	60	127	0.94	1.23	1.35
Coefficient of variation		0.92	0.67	0.62	0.30	0.59	0.73

1. Only male agricultural labour is used because of the well known definitional Change in the 1971 census, which has made the female agricultural labour data non-comparable.

SOURCE : Centre for Monitoring the Indian Economy (C.M.I.E.) Basic Statistics relating to the Indian Economy Vol. II Bombay 1981.

labour absorption capacity of the agricultural sector set out rural out migration and hence there was the spurt in urbanisation in them during 1971-81. Thus it is seen that there is a positive correlation between urbanisation and industrialisation processes, and a negative correlation between the increase in agriculture productivity and urbanisation upto a certain level as seen in the states of Punjab and Haryana.

But for proper correlation studies more in depth analysis are needed. Since growth of population in urban areas in India is caused by a number of factors namely agricultural productivity and its labour absorption capacity, industrial development, urban-rural wage differentials, difference in the provision of service and amenities between the urban and rural areas even ad hoc extension of urban boundaries to annex areas, it is not a simple exercise to see the interplay of all these factors over a period of several decades.

Recent studies have shown that despite the emphasis on balanced regional development, disparities among states have widened with per capita income showing substantial variations over the 15 years period ending in 1985-86 the beginning of the Seventh Five Year Plan period. Official reports reveal that the ratio of the highest to the lowest per capita income has risen from 3.07 in 1970-71 to 3.43 in 1985-86. Bihar the poorest state shows a low per capita income of only Rs. 1548/- (1985-86) which is only 59.6 percent of the national average figure of Rs. 2596/-. In 1970-71 Bihar's per capita income was Rs. 402/- which was only 36 percent less than the national average. It is seen that in 1985-86, 12 states out of 23 had a per capita income less than the national average. It is also seen that all these states also have a low level of urbanisation. However, in many of them the rate of growth of urbanisation is high, reflecting recent industrial development and distress migration from rural areas.

With this brief background it is argued that the pattern of *regional variations in urbanisation* in India is essentially a *product of the pace and spatial variations in economic development*. Industrial growth, therefore, is closely related to urban growth. Large urban agglomerations, obviously, show equally large concentrations of industrial workers supported by workers engaged in tertiary and other services. The industrial location policy, with an overtone of spatial dispersal, since the first Five Year Plan, for many well known reasons, has had a limited impact on spatial dispersal of urbanisation. No doubt, this has given a spurt to new urban growth at various places. But

it is seen that though the spatial spread of urbanisation is somewhat wider now than it was in the fifties the relative pattern of concentration of urban population has become more uneven. In other words, while an accelerating concentration process of population is seen with the cities, particularly with the medium sized ones, the still smaller centres are growing at much slower rates. Further, the distribution pattern of cities in 1981 clearly reveals a few areas of spatial clustering. Attempt has been made subsequently to analyse these two processes (i.e. increasing concentration of population in large cities and the emergence of spatial clusters) with a view to understand the determining factors. For, we know that these two processes, amongst others, are major conditions which determine the pattern of regional variation in urbanisation.

(b) *Urbanisation and Number of Urban Centres*

Another factor which has influenced the regional variation in urbanisation is the rate of increase in the number of urban centres in India. Studies have showed that a vast majority of the present urban centres have been urban in character over a very long time. Since the beginning of this century the number of urban settlements increased by only 80 percent to be 3245 in 1981 and over 30 percent of this increase has come only during 1971-81. This phenomenon stands in contrast to that of the increase in urban population, which increased almost by 600 percent during the same period. This indicates that most of the urban growth was due to accretion of population to the existing towns at every level and a long established trend of slow emergence of new towns due to slow proliferation of non-agricultural activities. This trend, on one hand, has perpetuated the spatial imbalance in urbanisation as existed in the country before independence. On the other, it has further skewed the population distribution amongst the urban centres of different size. This trend indicating a static phenomenon is said to be the major reason for keeping vast areas of the country devoid of urbanisation. In this context it may be said that planning to bring about a change in this static situation should deliberately create conditions whereby the spatial spread of non-agricultural activities become faster and results in the emergence of new towns. Such a planning also must consciously encourage off-farm employment and a more significantly equitable sharing of urban income and opportunities by a majority of the urban population. The nature and degree of thrust in such a planning has to reflect a positive policy towards urbanisation with effective mechanisms to reduce the present regional imbalances in particular.

The Patterns of Regional Variation in Urbanisation

A problem generic to any interpretation of spatial distribution of urban centres is that it is related to specific attributes—both natural endowments and man-made improvements, of particular regions. In other words, any attempt to interpret spatial aspects of urban centre distribution has to consider the space-based locational attributes of the region in relation to economic development both inputs and factual achievements, and above all, relate it to the demographic profiles.

There are many different ways to measure urbanisation established by classic economic and demographic studies. These mainly relate to :

- (a) The study of changes in the levels of urbanisation i.e. proportion of population living in urban areas, and
- (b) Measuring the urban-rural growth differentials i.e. assessing the direct measure of transfer of population from rural to urban areas, and
- (c) The growth of urban population itself. The picture of different agglomerations in (all) the urban centres in then tempered with their regional spatial locations to arrive at the regional differences and their significance.*

before one could discuss the Indian urban settlement pattern and urban growth, a chronological analysis of urban growth and distribution of towns and cities through history would be essential to understand some of their implications to the present urban structure. Before the advent of Europeans and the consequent colonisation of India by the Britishers, there was a significant implant of physical setting to the growth of towns in the country. All along the coastal front and a long river transport routes towns flourished taking advantage of linkages from transport and trade, and life support system considerations. In the hinterland,

towns developed along the trade routes, and at several confluences of rivers or water bodies religious and educational centres flourished. In addition the numerous capitals of the various Emperors, kings, chieftains provided the base nuclei for town developments all over the geographical spread of the country.

(a) *Pre British Period—Emergence of Nodal Points*

Before Britishers came to India, Mughal Empire was the largest and important empire which ruled India in 16th, 17th and early 18th centuries. Many cities and towns flourished all over India. In Akbar's empire there were 120 big cities and 32 towns, Delhi, Agra, Fatehpur Sikri were the seats of power for Mughal empires. From a functional point of view the cities and towns of the Mughal empire can be classified into the following broad categories. Many of these towns still continue to be urban centres, particularly those which were created at nodal points and which were established as administrative centres. But those which originated and flourished on the basis of local craft and use of local resources suffered during the British rule. Many of these and of the part towns declined even perished as important urban centres commercial and industrial towns namely Patna, Surat and Ahmedabad have grown to be large cities. But port towns namely Bimilipatnam, Gogha, Masulipatnam have almost perished as port towns.

ADMINISTRATIVE TOWNS

The towns of Imperial or Provincial capitals and sarkar or pargana headquarters falls in this category eg. Agra, Delhi, Fatehpuri Sikri, Lahore, Burhanpur and Aurangabad.

These towns were originally meant for administration but subsequently they also became busy centres of commerce, crafts eg. Agra and Shajahanabad.

*Generally the states are considered as regions and the interpretation of urbanisation and urban trends on statewide basis is available in census and their demographic literatures.

COMMERCIAL AND INDUSTRIAL TOWNS

Patna, Surat and Ahmedabad were the important centres of commercial and industrial activity in the Mughal empire.

MANUFACTURING TOWNS

The principal production of these towns were cotton and silk goods. Important towns in the province of Gujarat were Ahmedabad, Baroda, Broach, Cambay, Surat, Rander, Nadiad, Muhammadabad, Gundevis, Nausari, Dabhoi etc.

In Bengal Qasimbazar, Malda, Dacca, Hugli, Rajmahal, Murshidabad near Hooghly Shahbazpur Sonargaon, Cushtadanga Balighat were famous for silk and jute related activities. Besides these Patna in Bihar and Balasore in Orissa were worthy to mention. Large no. of weavers were concentrated in these towns. Similarly towns namely Khairabad, Daryabad, Lucknow and Samana were famous for five textiles.

AGRICULTURE PRODUCE TOWNS

Towns namely Biana (Agra), Sehvana (Sing), Sarkhej (Gujarat), Khurja, Kol (Agra) were the major centres of export of agriculture products.

NODAL TOWNS

These are the towns situated on the bank of the navigable rivers or on Imperial high ways : The towns of Qandahar, Thatta, Bhakkar, Multan, Sehwan, Peshawar, Ghazni, Lahore, Sirhind, Panipat, Delhi, Mathura, Agra, Dholpur, Gwalior, Narwar, Sironj, Sidhpur, Patan, Nahrwala, Ahmedabad, Benares, Patna, Monghyr, Balasore, Ujjain, Dhar, Hapur, Moradabad, Bareilly, Lucknow etc.

PORT TOWNS

The important port towns are Konkan, Malabar Coromandal, Gingelly coasts and in the Bengal region were Lahori-bandar, Gogha, Cambay, Broach, Surat-swally, Rander and Gandhan on the western coast, Satras on Hugli, Sripur, Chittagong, Pipili Harpur. Balasore in Bengal and Orissa, Bimil Pattnam and Vizagapatnam on the gingelly coast, Masulipatnam, Narsapur and Nizampatnam in the coromandal coast.

PILGRIM TOWNS

The important pilgrim towns were Benares, Mathura, Prayaga, Hardwar, Thaneshwar, Gaya, Ayodha, Nagarkot, Jagannath, Surajkhud, Ujjain, Dwaraka, Kanchi and Kashmir.

URBAN POPULATION

In Akbar's empire there were 120 big cities and as many as 3200 towns. This is also borne out by

the testimony of the European travellers who visited India during the 16th and 17th centuries and favourably compared Indian towns in respect of size and population with towns in Europe and elsewhere. According to historians Delhi appeared no less populous than Paris. Both Agra and Fatehpur Sikri were each held to be greater than London. Lahore was placed second to none either in Asia or Europe. Patna, Surat or Dacca had populations of 2,00,000 each. Hugli in 1630 had a population of 24,400 and even the small town of Samana had 11,000. From these it can be fairly concluded that Mughal Empire towns are no less populous than the present ones though statistics for each and every town is not available for a more closer analysis.

URBAN STRUCTURE AND PLANNING

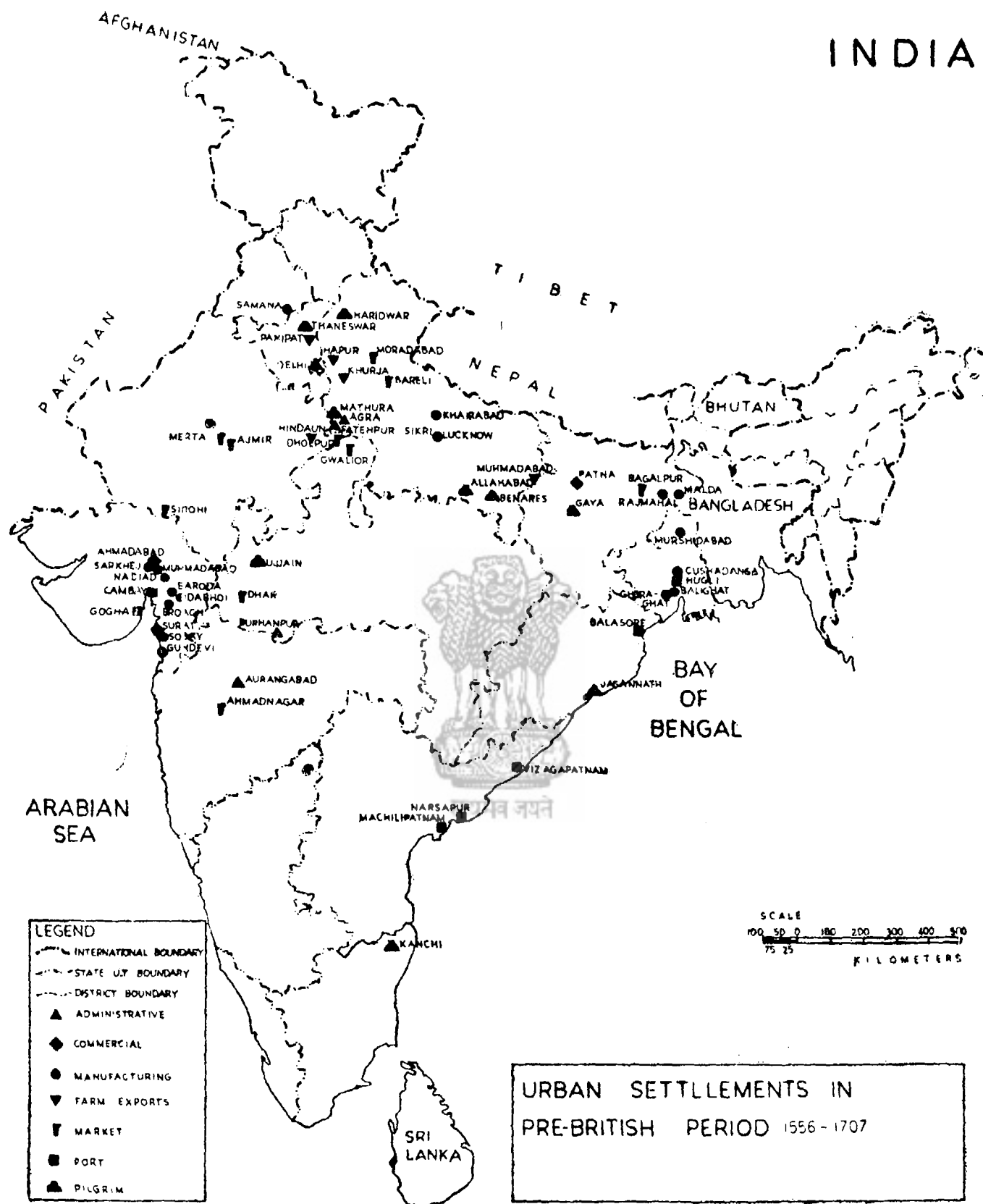
It appears that in the location of forts or imperial residences, houses of nobles, merchant colonies, quarters of artisans, professional men and labourers, mosques, temples, dharmasalas, places of burial and cremation, gardens, tanks, wells etc. some sort of planning criteria was adopted.

Most of the cities are circular or semi-circular in shape with a citadel in its centre. As a general practice gardens, tanks, cemeteries and cremation grounds and slaughter houses were not located close to the town. The castle or fort towns were located with a river on one side or on two sides. If there was no river on any side, it was usually encircled by a deep ditch. A fort was built in almost every town, contained accommodation for officers, karkharas kachehri quarters for staff, water reservoir, store houses etc. The forts generally were spacious enough to provide shelter to a sizeable portion of the town population in times of danger.

The towns were usually protected by massive fortified walls, which had battlements and string courses and towers mounted with heavy canon at all corners and strategic points or on top of the city gates which were guarded by a posse of guards. The outer wall of the fort, built of rocks, red sand stone or of mud usually had two gates, one at the front with dome shape entrance and the other at the rear.

The sources reveal that except one or two big, broad and paved streets, the other streets and lanes were narrow and muddy. Outside the enclosures of the nobles, the rest of the people lived in separate wards together according to professions. The poorest and menial servants strata usually had their

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quarters close to the city walls. Each locality or ward had its own market and big markets were usually confined to big streets. Suburbs were developed outside the wall in later stages. These towns had usually a number of mosques and temples. Towns were often also surrounded by magnificent gardens.

In general, one finds a clear nexus between the sitting of towns and natural resources particularly abundant water, fertile land for cultivation, and good terrain for easy accessibility either by water transport or roads. Clustering or belting of the towns, as we find now, was not seen and the spatial spread was fairly even.

(b) *The British and the Contemporary Period : Colonial Structure and its Legacy*

These basic tenets provided the base frame for development of towns and cities in India during the subsequent colonial era also but with different emphasis and significance and influenced by the levels of technology and their applications over the present century. Port towns, capitals by various shades of rulers, trading towns and residencies for the British population were developed and located all over with the same considerations in view. With the development of road and railway network systems across the length and breadth of the country, the defence or strategic and logistic locations for movements of armies and their needed supply facilities gave a fillip to a chain of contonment locations which thrived on the linkages created by the national road and rail grids. Another significant and a major settlement structure development that provided the present base spatial urban locations is the administrative structure evolved and implemented by the British rulers, namely the districts and the head quarters development left its distinct and significant implant on the spatial urban settlement pattern and structure in the country. The location of these urban settlements was mainly influenced by terrain conditions, their accessibility and linkages, and the spatial commanding position these towns relatively provided for their hinterlands.

With the location of mini seats of power (for administrative purposes) at local levels, these district (and also tehsil) headquarter towns influenced the local urban structure and growth patterns and as well the linkages within the districts.

Urbanisation during 1761 to 1901

Under the British rule, India's economy was exclusively oriented towards colonial exploitation. In

its wake spinning and weaving industry suffered worst. Shift in agriculture from production of cereals to cash crops, like cotton and jute for export purposes actually resulted in decline in food production. India became a market for the manufactured goods of British and raw materials were siphoned off to Britain to keep the process going. Industrial and the commercial base of many towns which had established their central role even before the British came were hit hard. Many town which flourished on trade, traditional industry & local craft declined through out India during the first half century of British rule. Urbanisation pace was slow.

By the middle of the 19th century with the consolidation of the British rule new towns emerged which were mainly based on administrative functions. These were imperial capitals, provincial capitals, and district tehsil headquarters. For the retreat of British during summer. Many hill stations were developed. Yet, the whole pace of urbanisation was slow until the end of the century though thus the total number of urban places was 1851. Hardly one-tenth of the total population was living in urban places. This was because of the subsistence nature of the agricultural economy, highly localised new industrialisation in some parts of the country and the decline of local crafts, local trade and local resource based industries.

A large number of towns of the 18th century have retained their urban character and position of importance even now. Many of them experienced severe stress and strain in the later parts of 18th century, 19th century and early 20th century. Few towns like Delhi, Ahmedabad, Baroda, Surat, Lucknow, Patna, Mathura, Gaya etc. Grew fast in the first half of 20th century and reached city status by 1950, although most of the towns experienced very nominal growth or negative growth in the first town decades of 20th century. From 1920 onwards towns recorded differential rates of growth, and in overall many of the towns recorded highest growth rates during 1931—41 and 1941—51 decades growth rates of some of towns are given in the following table.

Majority of the small towns of Mughal period, which were the agricultural produce collection centres, trade and commerce, traditional industries and few provincial capitals, continued to be still towns during the British rule. Growth of urban population in these towns however was slow, Aurangabad, Broach, Combay, Kharirbad, Daryabad, Saunana, Khurja, Seh-wana, Panipat, Muhmadabad, Hapur, Moradabad etc. are some of these towns which continued to be towns even now.

Continuance as Towns, Change of Function and Rate of Growth of Selected Towns of Mughal Period

Name of the Town	Main Function	Growth Rates					
	Mughal Period	In 1901	1901-1911	1911-1921	1921-1931	1931-1941	1941-1951
Delhi	Administrative	Division Head-quarters	11.1	27.9	47	55	106.7
Agra	Administrative	Provincial Capital	-1.4	0	23.8	23.7	32.2
Ahmedabad	Commercial and Industrial	District Head-quarters	16.6	26.4	14.5	89.7	47.4
Patna	Commercial and Manufacturing	Division Head-quarter	1	-14.1	33.1	23	44.3
Surat	Commercial and Manufacturing	District Head-quarter	-3.3	1.7	-13	67.9	27.7
Vadodra	Manufacturing	Native state capital	-4.3	-4.7	19.2	35.8	37.9
Lucknow	Transport	Provincial Capital	-1.6	-4.6	14.2	41	28.3
Gwalior	Transport	Native state capital	-39	34.6	11.7	43.7	32.4
Mathura	Pilgrim	District Headquarter	-3.1	-9.2	N.A.	25.8	31.3
Gaya	Pilgrim	District Head-quarter	N.A.	35.3	30.3	19.6	27.1
Moradabad	Transport	District Head-quarter	8	1.9	33.7	28.8	13.6

Functional Changes of Towns

Functional character of many of Mughal towns were changed over the period of time under the British rule. Mughal period towns had district functions. Under the British rule many of administrative, trade and commerce, manufacturing and pilgrim towns were made into division/district headquarters or provincial native capitals. It is the administrative function that sustained the growth of these towns, other gradually functions became subsidiary. However some of these towns namely Ahmadabad, Surat, Vedodra, Gwalior etc. transformed into as strong industrial centres, Delhi grew as the capital of India, Lucknow, Patna become state capitals, Mathura, Agra, Gaya etc. continued as pilgrim towns.

(c) Major Trends and Patterns in the Temporal Spatial Variations since 1901

The pattern of regional variation can meaningfully be analysed from two angles; first, based on the existing spatial variations in the quantitative content of urbanisation, second, spatial variations in the trend of growth of urbanisation. It may be understood that while the pattern derived out of the first angle of analysis would be more a product of a historical legacy, the pattern derived through the second way of analysis would essentially be the product of the development processes and investment decisions introduced since

independence more particularly since 1962, the start of the Third, National Five Year Plan.

A general spatial temporal analysis of urbanisation in quantitative terms clearly shows wide regional variations between the states and also between the subregions within large states. A spatial temporal analysis of urbanisation in quantitative terms over period beyond 1961 becomes difficult because of declassification of a large number of towns during 1951-61 and also due to the inbuilt arbitrariness in the classification of towns as followed by the Census of India. However, the urban history of India provides a stable structure of urban settlements. It is said that even way back in 1568 India had 3200 towns and 120 cities, (1) a situation which very much resembles the present condition. A larger part of these towns, particularly the larger ones, have remained stable in their growth through the centuries. There has been significant variations in the emergence of smaller urban settlements which through the period kept on shifting their position as urban centres across the rural urban margin. A relatively slow increase in the number of smaller towns and their frequent appearance and disappearance as urban centres (1901—1961) has been indicative of an equally slow increase in the demand for services and marketing in the rural areas. It is only after 1961 that a significant increase in the emergence of small towns is seen which is indicative of strengthening of the rural-urban relationship particularly in the areas of service functions and marketing.

TABLE 1

Growth Trends of Urban Population in India—1901-1981

Year	Urban pop. in millions	Level of urbanisation	URGD urban-rural growth differential	Annual growth rate of popn. of towns above 20,000 (% per year)	Number of all towns and cities
1	2	3	4	5	6
1901 .	25.6	11.0	—	—	1834
1911 .	25.6	10.4	—0.61	0.22	1776
1921 .	27.7	11.3	0.97	1.16	1920
1931 .	33.0	12.2	0.03	2.37	2049
1941 .	43.6	14.1	1.71	3.90	2210
1951 .	61.6	17.6	2.70	4.17	2044
1961 .	77.6	18.3	0.46	3.58	2330
1971 .	107.6	20.2	1.29	3.85	2531
1981 .	156.0	23.7	2.11	4.18	3245

Raza Moonis et.al. "India Urbanisation and National Development" in M. Honjo (ed.), Urbanisation and Regional Development, Singapore; Marazen books—1982.

The above table shows two major facts; first as already stated, the rate of growth of urban population has been very significantly faster than that of growth

of number of urban centres indicating a long and fairly stable condition in the spatial distribution of urban centres through the century, second, a clear trend of significant acceleration of urbanisation is seen since 1961. This is evident from both 4 and 5 columns.

But when one tries to analysis this trend in respect of states, one finds a widely varying picture. As it may be seen in the following table out of 13 major states (having 10 million or more population) 6 states show higher decadal URGD rates than the national average since 1961. Tamil Nadu, where the process of urbanisation has almost stabilised and the agricultural productivity has been on steady increase, actually shows a decline in the URGD since 1971. The states of Orissa and Bihar present a different picture. Low increase in agricultural productivity and acceleration of industrial investment show a high level of URGD all through since 1951. The rates of growth of urbanisation in other two states have been high partly because of their very low base of urban population. But the growth is steady and rapid. Maharashtra a state industrially advanced, presents a picture which is quite near to that of Tamil Nadu. Since 1961 the increase in URGD in this state is very marginal indicating stability in urbanisation. Punjab, agriculturally the most prosperous state, shows very significant increase in the URGD rate since 1971 indicating spurt in urbanisation as a consequence of saturation of absorption of population in agriculture.

Table 2 Variation in Rate of Growth Urbanisation by States

	No. of towns & cities in 1981	No. of New towns in 1981	URGD		Population of towns above 20,000 only as % of total	
			1961-71	1971-81	1971	1981
Anhdra Pradesh	234	29	1.28	2.42	16.0	21.1
Bihar	179	30	1.93	2.55	8.0	10.9
Gujarat	220	29	1.21	1.48	22.5	26.7
Karnataka	250	34	1.13	2.44	18.2	23.9
Madhya Pradesh	303	72	1.59	2.78	12.2	15.7
Orissa	103	27	3.19	3.99	6.0	9.0
Haryana	79	17	0.31	2.80	13.9	18.1
Punjab	134	28	0.39	2.14	18.5	22.4
Tamil Nadu	245	18	1.79	1.28	26.3	29.9
Maharashtra	276	31	1.45	1.79	27.7	32.5
Rajasthan	195	43	0.99	2.20	12.9	16.5
West Bengal	130	19	0.16	0.93	22.9	25.3
Uttar Pradesh	659	368	1.03	3.08	11.9	13.8
INDIA (Except Assam & J&K)		770	1.29	2.11	16.9	20.5
INDIA (Only above 13 states 3007)						

The above analysis has further to be extended to examine the regional variations in economic development with a view to highlight the relationship between

economic development and urbanisation. It is well known and several studies have concluded that the most industrialised states namely Tamil Nadu Maharashtra

and Gujarat are also the most urbanised (above 30%). Relatively speaking the states which show a greater per capita state domestic product also show higher level of urbanisation. These states also include the

ones which have experienced rapid increase in their agricultural productivity as consequence of green revolution namely Punjab and Haryana. Conversely the poorest states show the lowest levels of urbanisation.

STATE	Population of all towns as % of total			Per capital SDP (Constant 1970-71 prices)		
	1961	1971	1981	1961	1971	1981
Maharashtra	28.2	31.2	35.0	769	811	1008
Tamil Nadu	26.7	30.3	33.0	571	616	682
Gujarat	25.8	28.1	31.1	697	845	884
Karnataka	22.3	24.3	28.9	559	675	723
Punjab	23.1	23.7	27.7	760	1067	1308
West Bengal	24.5	24.7	26.5	758	729	765
Haryana	17.2	17.7	22.0	627	932	1029
Andhra Pradesh	17.4	19.3	23.3	518	586	678
Rajasthan	16.3	17.6	20.9	500	629	591
Madhya Pradesh	14.3	16.3	20.3	472	489	463
Uttar Pradesh	12.9	14.0	18.0	457	493	524
Bihar	8.4	10.0	12.5	390	418	438
Orissa	6.3	8.4	11.3	392	541	514
Coefficient of Variation	0.37	0.34	0.29	0.23	0.26	0.33
						(1979)

These data which are based on Central Statistical office releases and have been quoted from the report on Task force on Housing & Urban Development, Planning Commission 1983 have their obvious limitations. But it is clear that there exists a positive and direct correlation between the level of economic development expressed in terms of per capita SDP and the level of urbanisation at the regional levels. The levels of economic development being largely determined by industrial development and agricultural development. It can therefore perhaps be inferred that urbanisation is essentially a concomitant process of industrial or agricultural development, particularly the former. In this context, the national policy of preferential funding to the poorer states and incentives for industrial activities in those states is a policy in right direction to bring about a more balanced regional spread of urbanisation.

In order to probe further in this aspect, a simple correlation between the levels of agricultural and industrial development achieved by different districts in India and the nature and pattern of urbanisation in each of these was attempted. Percentage share of each district in the total national production of wheat and rice based on average of production figures for the period 1975 to 1980 was analysed as an index of level of agricultural development. Those districts which had a share of one per cent or more were selected for the above analysis. The share of number of factories each

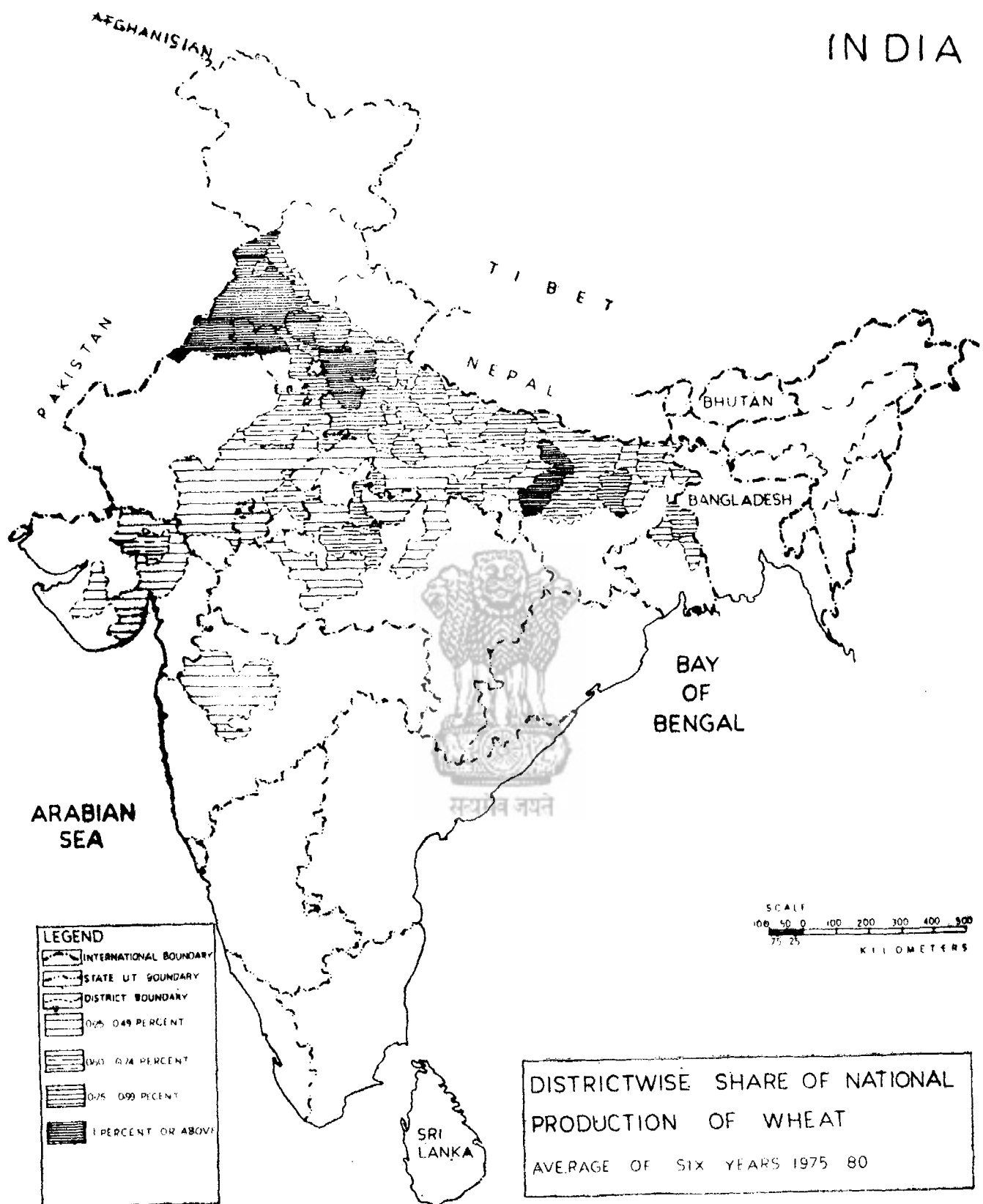
having a daily employment of 100 persons or more in the same districts was also assessed. It is found that out of ten states for which data was available, eight showed a clear positive relationship between the level of urbanisation and the levels of agricultural and industrial development. In relatively backward states, for example, in Orissa this phenomenon is most pronounced. Balasore and Cuttack are the two agriculturally advanced districts in the coastal belt. Sambalpur and Sundargarh districts during the last two decades have been extensive industrial development including the establishment of the Rourkela steel plant. Sambalpur also has the Hirakud command area which is the best agriculturally productive area in west Orissa. These four districts together constitute only about 25% of all districts in the state and about 18% of the total geographical area but account for 80% of urban population of the state. In terms of intrastate variation West Bengal and Orissa present the extreme. Punjab, presents the other extreme. Nearly 80% of all towns and cities are spatially spread in the agriculturally and industrially prosperous districts which number 9 out to 12 districts. These districts account for 86% of all factories which have employment of 100 persons or more in the state. The spatial spread of urbanisation is fairly even in the state.

The above analysis is intended to show that urbanisation has essentially been a concomitant to either industrial development or agricultural development

or both. Here the case of Maharashtra is worth mentioning. This state has the highest level of urbanisation, yet not a single district in this state contributes even one per cent share towards the national production of wheat or rice. But within the state there is very significant imbalance in terms of industrial development so also in the level of urbanisation. Very low levels of urbanisation in the Ratnagiri district or in the districts of Vidarbha area stands in sharp contrast with that of Bombay, Thane and Pune districts.

The same way a picture of uneven regional distribution is seen when we consider the states of Maharashtra, Tamil Nadu, Gujarat and West Bengal which together accounted for 55% of the total value added and 52% of the total employment in the manufacturing sector in 1976 (this has considerably reduced by the mid 80s due to vigorous policy of industrial dispersal to the backward states) also account for more than 40% of the total urban population of the country.





REGIONAL VARIATIONS IN URBANISATION & URBAN-RURAL RELATIONSHIP

National Development Policies Including Industrial Location as Factors Affecting Variation

The policy of industrial dispersal through incentives to the backward districts has been followed over the last two decades. In early sixties according to the NCDBA, Planning Commission Report of 1982, 247 districts out of 350 were identified as industrially backward which covered about 60% of the population and 70% of the total area. But due to the natural tendency of the private entrepreneurs to establish industries as close as possible to large cities, it is observed that almost 90% of the concessional industrial investment funds were utilised in only 22 out of 247 backward districts and further almost all these 22 districts were in the vicinity of large or metropolitan cities. Such a situation obviously left vast areas of the country with practically no significant industrial development and consequently with low levels of urbanisation (less than 15%). While such a dispersal policy of industries has not brought result as expected, trade protectionist policies have thwarted growth of industries in Calcutta and Madras seriously affecting their growth and the urban growth in their hinterland. Similarly the textile industry policy which favoured handlooms over powerlooms have thwarted the growth of many cities which were based on mill textile industry. In such a situation both the growth of the city and its hinterland is seriously affected. At the sametime stricter enforcement of industrial licensing policy has gravitated a large number of the entrepreneurs to put their industries in the proximity of administrative headquarters or the seats of government which are again the major urban centres.

Thus it can be said that the policies of industries location, trade control, licensing of industries etc. which are the crucial tools to bring about a dispersal of industrial activities did not have any significant result until the late 60s. But since after the Third Five Year Plan some clear trend of dispersal, though still weak, is seen when we view this dispersal, at a national scale. Major industrial complexes now are

seen in all parts of the country; the only lagged areas being the north-east and some tribal populated parts of the east-central section. The 1961-81 period shows that the proportion of value added in manufacturing in the net domestic product of states has gone up considerably in all states, being faster particularly in less industrialised states namely Orissa, Madhya Pradesh, Punjab, A.P. and U.P. Analytical works in this context particularly that of A.U. Shekhar (1982), conclude that while this has been a welcome trend and it will have a direct influence on reducing regional imbalances in urbanisation on a country wide basis, reduction of imbalances at inter-regional levels is very slow. In other words, though one finds a very significant change from the pre 1961 picture of statewide or even regionwise (sub state level) variations in urbanisation indicating a more equalising trend, such a process is not seen within the regions, emphasizing the existence of large vacuum areas in between a few sparsely distributed nodes of urban growth. This is perhaps mainly due a fluctuating situation in terms of increase in agricultural productivity in the states. Except the states of Punjab, Haryana, Karnataka and Andhra Pradesh where there has been a considerable increase in agricultural productivity during 1971-81, in all other states there is either a very marginal increase or actual decrease. Infact in six out of fourteen major states there was actually a decrease, a clear trend of increase in regional disparity in this aspect is seen in them. Because of the dominance of the agricultural sector in their economy, regional disparity is also seen in terms of percapita income distribution as reflected in the net state domestic product in these six states. Thus, one finds that the trends in regional distribution of industrial productivity and agricultural productivity are widely amongst the states varying, two groups of states as referred to above infact present a contrasting picture. A group of eight states clearly show a trend of narrowing of regional variation in industrial and agricultural productivity and consequently also show is a similar

trend in regional distribution pattern of urbanisation. In contrast, in the states of low agricultural productivity for example in the eastern and central eastern parts of the country, an increased spurt in urbanisation is seen which is the result of this agricultural stagnation caused by equally stagnant technological development.

Special Regional Characteristics of Urban Growth

In this scenario of urban development and growth, there could be many factors influencing the spatial distributions of urban settlements. Amongst them the following can be identified as having significant influence. The rural-urban disparities (as linked to agricultural prosperity or otherwise), the social attitudes of ethnic or regional groups of modernisation, tradition and change, the governmental intervention in terms five year plans and other programmes schemes, the major impact of national irrigation and power network and above all the locational decisions for industries, offices and nodal facilities.

In fact in the Indian context, the various five year plans have a strong regional bias in the sense that they included specific location oriented programmes in the physical spread of the country. The impact and implications of these programmes, however, have been different in different regions of the country due to the inherent regional diversities and disparities. This further accentuates the regional variants for urban growth triggering probably a very different type of growth than that was intended under the plan postulates. This is illustrated by the fact that agricultural prosperity was achieved only in select regions although irrigation systems were developed in several regions. Alternatively the concomitant population distributions which occur between rural and urban sectors result in a regional specific settlement pattern.

Considering the post-independence era, the country's urban spatial distribution can be analysed broadly to understand the regional implants that have occurred through our development efforts under the six five year plans and few annual plans. In the north and north-western parts of the country, there is a vast stretch of densely populated area with strong links based on small and medium towns. The Punjab, Haryana, Western Uttar Pradesh and up to Delhi are areas which are agriculturally rich with a fairly established network of irrigation and power systems. The agricultural surpluses with marketing and service functions dominate the functional fabric of towns in these areas. Added to it are the industrial developments to service both the agricultural and urban economies of the area.

South-Bihar, South-eastern West Bengal, Central eastern Orissa and southern Madhya Pradesh are areas where mining related industries and power generating centres are located. The industry based urban centres in this area show high growth as these areas have received major influx of population in search of employment. To a certain extent the characteristics of south Bihar and the adjoining West Bengal areas are similar with heavy population concentrations in the newly developing urban centres.

Coastal Orissa and coastal Andhra and Kerala show linear urban development characteristics all along the coast. Central Andhra Pradesh and Tamil Nadu have fast growing small and large towns characteristic of irrigation development and industrialisation. Only central Orissa which is full of hills and forests has very low urban development, mainly related to topographical conditions. Karnataka and Maharashtra are highly urbanised with well developed road and power network system and having major industrial and trading complexes. As the agriculture development in this area is restricted to available water resources positions the growth characteristics of town is heavily oriented to secondary and tertiary sectors. Gujarat in the west has a combination of linear pattern (north-south) along the coast with high growth characteristics, and in the interior a slow growth oriented small town clusters. All the same the urban characteristics are more industrial oriented in rest areas. Rajasthan and Madhya Pradesh have peculiar regional implants related to natural endowments, desert and arid conditions in the former and newly developed agro-industrial developments in the latter. The consolidation of the existing towns by population accretions is more in this region.

This broad sweep of urban spatial analysis and trends in urban growth clearly indicates that urban development and its growth are very much a function of the specific regional characteristics. Availability of resources and location, specific decisions through development programmes, and the climatic conditions have together influenced urbanisation and thereby its spatial distribution patterns. Deliberate location of new activities through development programmes has had its singular importance in creating new nuclei of urban growth in areas of low or no urbanisation.

Another major trend in this status scenario is the growth of metropolitan cities. These cities being

highly hinterland and regional oriented, both for resources and manpower, have achieved high level of primacy in the urban hierarchy which is considered dysfunctional. But this is mainly due to the policy implications of locational decisions by government, both at centre and state levels.

Because of the interplay of a complex set of factors a holistic approach is desirable to understand the regional variations in urbanisation. Apart from geographic, demographic, and economic considerations, the environmental and ecological issues also need to be understood. The determinates of spatial distribution of urban settlements, therefore, are complex and are related to the scale of regional services that get developed.

Within this broad context an attempt is made to understand the regional variations in urbanisation in the country in different decadal periods during this century.

(a) *Patterns of Urbanisation 1901—1951*

The trend of urbanisation in the first half of the 20th century was rather uneven. The first two decades recorded very low rate of urbanisation which picked up in the later decades. The decade 1941-51 which had the aftermath of independence witnessed the highest rate of growth of urban population. At the sub national level, however, one finds very significant regional variations in the pattern and pace of urbanisation and towns of different population size experienced very diverse rates of growth. This was because of various factors. Variation in the percentage of urban population, rate of growth of urban population, towns, urban agglomerations by size groups are given in the table 1 and table 2. Decade-wise regional variation of urbanisation and the factors affecting these are described below.

Urbanisation in 1901

There were 1851 urban places and agglomerations accommodating an aggregate population of 25.8 million i.e. 10.8 per cent of total population in 1951. Broadly speaking the northern plains, parts of western and southern India and the coastal plains had the major concentrations of urban places. In the Himalayas, north eastern plateau and in the Rajasthan desert naturally, towns were few and far between and urbanisation was practically non-existent in these areas.

Highest concentration of urban population was in the northern plains, particularly with zone surrounding Delhi. In some of the districts in this area more than 15 per cent of the population was urban, obviously the main reason being the rich agriculture hinterlands

of the Indus and Ganga plains. Historical and political factors also contributed to this. Many of these towns were fort towns and some were capitals of local princely states.

The second most urbanised area outside this northern belt, where urbanisation from 5 to 15 per cent, was the jute producing Ganga belts; cotton producing areas of Gujarat, Maharashtra, Karnataka and Tamil Nadu; and the wheat producing areas of Punjab and Haryana Malwa Plateau. Functionally towns in these areas were mainly the collecting centres of agricultural produce for export, especially to the U.K.

Area with very low percentage (less than five per cent) of urban population were widely distributed and dispersed over the whole country. Whole of Kerala coastal parts of Orissa, Andhra Pradesh and Konkan Telangana, parts of Maharashtra plateau and interior Tamil Nadu falls in this category. Economy of these areas was subsistence agriculture with characteristic uneven terrain, low and variable rainfall and infertile soils.

Number of districts in Jammu and Kashmir, mountainous parts of the Uttar Pradesh, Arunachal Pradesh, Nagaland, Manipur, Tripura and Mizoram, the eastern Ghats in Orissa had no urban population at all. Many of these areas are hilly and mountainous had no agricultural activity practically with places inhabited by tribes.

Urbanisation 1901—1911

The first decade of the 20th century was marked by a sluggish process of urbanisation. There was only a nominal increase in the urban population from 25.8 million to 25.9 million, representing a growth rate of hardly 0.4 per cent. The urban population proportion in the total fell from 11.0 to 10.4 per cent. Primary reason being the decade experienced number of natural calamities. Recurrence of epidemics of plague, cholera, malaria and famines were common throughout the country. Decline in India's exports of cotton, leather, sugar and coffee in face of growing international competition was also responsible for arresting the growth of many market manufacturing and export oriented towns. There was also great variations in the regional pattern of urbanisation which was originally due to the varying intensity of epidemics. Virtually the whole of the northern plains had no increase in urban population due to this reason and the consequential economic stagnation. Within the northern plains, the western Malwa tract of Punjab, Mussorie—Nainital hilly tract and the Calcutta Region (where was the establishment of new jute textile mills) showed positive urban growth. Most of the places in central India, eastern Rajasthan, western Madhya Pradesh,

Maharashtra, Gujarat, Karnataka had sluggish urban growth.

On the contrary most of the towns in the two south Indian states of Kerala and Tamil Nadu recorded a positive growth. Towns in the Kaveri, Krishna and Godavari Basins recorded a positive growth. Marked increase in agricultural production in these areas brought spurt in agro-based industries and so in the growth of towns. Few towns in the Himalayas which were originally developed as summer resorts or cantonments such as Shimla, Mussoorie, Nainital, Kasauli and Dalhousie registered fast growth. Some towns in the Rajasthan desert also showed positive growth as most of these places were free from epidemics.

Urbanisation 1911—1921

Urbanisation gained strength in this decade and the urban population increased from 25.9 million to 28.1 million registering a high 8.3 per cent growth rate. While the first half of the decade had normal population growth and the second half had below normal growth because of continuance of the epidemics in some areas. Half of the towns, however, nearly showed decrease in their population during this period while others showed fast growth mainly accounted by rural to urban migration. A new pattern emerged during this period. While the strategic rail towns had showed fast rate of growth the port towns showed decline indicating the emergence of internal market and the importance of transport nodes.

During this decade the pattern of regional variation in urbanisation was dominated by investment policies which were mostly oriented towards producing raw resources namely cotton, tea, coffee, jute etc. The cotton producing areas such as, tracts around Ahmedabad in Gujarat, around Nagpur in Vidarba and around Sholapur in south western Maharashtra and parts of Karnataka, plantation areas in Assam valley and south India, newly irrigated tracts in Punjab, Karnataka and some mining pockets in central India showed fast rate of urbanisation. It is economic growth in these areas which brought spurt in urbanisation.

Contrarily most of the Northern Plain, towns in greater part of the central India, whole of Orissa state, the Rajasthan desert area and the Himalayas in general and the Nizam's territory of Hyderabad, all had sluggish urban growth during the period. These areas were the major victims of epidemics associated with economic stagnation.

Urbanisation 1921—1931

The decade 1921—31 witnessed a faster urban growth compared to the preceding two decades. The urban population increased from 28.1 million to

33.5 million i.e. 11.9 per cent of the total population. The rate of growth was 19.1 per cent. Most of the towns which had showed stagnation or even negative growth during the last two decades experienced positive growth. The spread of urbanisation was wider through the country, though already established nodes continued to assume further dominance.

The main reason for increase in urban growth during this decade was control over the epidemics, and significant increase in the industrial activities in urban areas, the later which triggered larger rural urban migration. The areas which experienced accelerated urbanisation in the last decade continued the trend in this decade also. Coming to regional variations, Nizam's domain comprising of Telengana, south-eastern Maharashtra and north-eastern Karnataka recorded high urban growth. The southern half of Kerala. Parts of Tamil Nadu, the cotton producing areas of Karnataka, Maharashtra, Gujarat and Madhaya Pradesh stimulated the growth of market towns and cotton textile based industrial towns. The Punjab plain along with its adjoining areas in Rajasthan, Assam Valley Ghota Nagar plateau and Central India continued to show fast rate of urbanisation. New developments in irrigation industry and rail network extensions were the attributes of faster urban growth.

On the other hand, large parts of the Ganga plain, central India, Kankau region of Maharashtra, the coastal plain of Orissa and the Rayalaseema track of Andhra Pradesh had relatively very slow urban growth. These areas after the initial spurt in agriculture did not improve beyond a subsistence agriculture economy. This coupled with poor industrial development accounted for a sluggish urban growth.

Urbanisation 1931—1941

The process of urbanisation further accelerated during 1931—41 and registered an all time high 32 per cent growth rate. The urban population increased from 33.5 to 44.2 million. Many new towns emerged and the existing towns showed relatively fast growth. The rural to urban migration emerged as the dominant factor causing swelling of urban population. 1931—41. Progress of industrialisation and the worsening employment situation in rural areas accelerated urbanisation.

Even the Chota Nagpur plateau and the erstwhile central provinces experienced fast urban growth stimulated by the development of mining and industrial activities in this region. Cotton producing areas of Bombay—Karnataka, Gujarat, Western Madhya Pradesh and Tamil Nadu continued the fast pace of urbanisation. The growth of rubber, coir and paper

industries had kept up the pace of urbanisation in Kerala. The Nizam Territory maintained the fast pace of urban growth due to increase in agricultural produce, brought about by the implementation of several irrigation and power projects. The Andhra coast, Chatisgarh plain, Punjab plain and Western Uttar Pradesh all agriculturally rich areas experienced significant development of agro-based industries which led to a relatively faster urban growth.

The Ganga plain could not come out from a sluggish pace of urbanisation and the persistence of reasons such as high population concentration, subsistence nature of agricultural economy and low degree of industrial development continued. The coast, Chatisgarh plain, Punjab plain and Western still under the grip of epidemics and recurrent floods marked low rate of urbanisation.

Urbanisation 1941—1951

This decade witnessed the highest growth rate of urbanisation in the century and perhaps marked a turning point in the country's urbanisation. The urban population grew from 44.1 to 62.4 million an increase of 41.4%. Partition of India subcontinent and the subsequent inflow and outflow of refugees had far reaching effect on urbanisation. The most affected areas due to inflow of refugees were Delhi and its surrounding towns and Calcutta and its environs. Many new refugee towns grew up in northern India to accommodate the incoming refugees. Many north Indian towns, on the other hand, where considerable Muslim population was namely Amritsar, Shahjahanpur, Bikaner, Barcilly, Moradabad, Srinagar etc. recorded slow growth mainly because their loss of Muslim population due to outmigration. In contrast, most south Indian towns experience fast-growth and the thrust of urbanisation shifted to south and west. Many of the towns here acquired city status in that period.

During 1941—1951 Bombay and its neighbouring districts namely Thane, Nasik, Poona and Ahmednagar recorded highest rate of urbanisation. This was mainly due to establishment of many new industries, diversification existing industries and construction of new townships and residential colonies to accommodate displaced persons affected by partition. Whole Karnataka recorded fast urban growth mainly because of expansion of industrial centres. Increase in mining, mineral and industrial activities even brought faster urban growth to the Chota Nagpur plateau. Construction of new multipurpose dams in the Districts of Kerapur, Raichur and Sambalpur, increase in irrigation facilities in the Andhra coastal region were the causes of relatively fast urban

growth in a number of spot location. Assam Valley and the eastern districts of West Bengal witnessed massive urban growth due to mass inflow of refugees. But 1951 the trend of territorial spread or urbanisation which was seen emerging by 1931 consolidated firmly. The pattern showed reduction of regional disparity in urbanisation on the one hand, on the other, emergence of urban clusters or urban agglomeration was clearly marked around the nodal urban centres namely Delhi, Bombay, Calcutta, Madras.

(b) Urbanisation 1961—1971

During this decade the urban population growth rate was 38.2 per cent as compared to 26.4 per cent for the previous decade (1951—61). In absolute figures it increased by 30.2 millions from 78.9 millions in 1961 to 109.1 million in 1971, during this decade the proportion of urban population to the total rose to 19.9 per cent as compared to the 18 per cent in 1961.

The decade witnessed rapid growth rate of rural population at 21.9 per cent and the natural increase (Births over Death) was of the order of 2.2 per cent per annum or 25 per cent of the decade. However, the actual growth rate of urban population (alone) was 38.2 per cent. This natural increase is estimated to have contributed to almost 2/3 of the urban growth during the decade.

Rural-urban migration accounted for about 1/3 of urban growth involving over ten million persons. This was double that of the migrants during the previous decade. Amongst the 'Push and Pull' factors an important indicator crucial to migration from rural areas is the decrease in average size of land holdings from 3.0 ha. in 1961 to 2.4 ha in 1971. Another added influencing factor was the growing unemployment among 'service castes' in rural areas and who had to migrate to urban areas for employment opportunities.

The volume of rural to urban migration would have been greater but for the accelerated supply of labour from within urban places due to consistent natural increase in urban areas thus limiting scope for others. The urban population born in place of enumeration increased to 60.8 in 1971 from 55.2 in 1961.

Another notable feature of the decade was the enhanced urban to urban migration. The percentage of urban to urban migrants in total migrants increased to 32.8 from 30.6. This type of migration was typical relatively urbanised states like Tamil Nadu, West Bengal, Gujarat and Karnataka, the exception being Jammu and Kashmir.

Population growth rate in towns showed faster growth during the decade with about 40 per cent of

towns increasing by more than 30 per cent. Only about 15 per cent of the towns recorded slow growth of 15 per cent or less. A striking feature is the rapid growth of class I towns or cities. These increased in number to 148 in 1971 from 105 in 1961 recording above 30 per cent growth rate. City population increased to 53 million in 1971 from 35 in 1961 i.e. an absolute increase of 18 million in a decade. The metropolitan cities (1 million +) increased to 9 in 1971 from 7 in 1961. Together they accommodated 27.3 million or more than one half of the country's city population and about $\frac{1}{4}$ of total urban population. This rapid growth in cities was mainly due to their large scale capacity to generate employment in industry, trade and transport, administration and other self-employment to migrants in the informal service sector.

Three-fourths of the districts in the country (total—351) recorded urban growth rates higher than 30 per cent during the decade. This was more than that of natural increase.

Growth rate %	No. of districts	Per cent to total Districts
60+	82	23.6
30—60	175	49.7
15—30	73	20.7
Less than 15	6	1.7
Decrease	3	0.9
Entirely rural	12	3.4
	351	100.0

Amongst the areas of rapid growth were the north-eastern peninsula comprising eastern Madhya Pradesh, western Orissa and southern Bihar. In this tribal area the urban growth in the districts ranged from 40 to 120 per cent. This was chiefly due to the phenomenal growth in mining and mineral-based industries in the public sector. The huge investment in rail and road transport and the completions of multi-purpose projects like Damodar, Hirakud & Machkund for accelerated power generation added to these trends.

Newly reclaimed agricultural lands showed rapid urban growth coupled with fast increase in rural population. These were the "Terai" region of Uttar Pradesh, Dandakaranya in Madhya Pradesh, Chambal basin in Rajasthan, Bhakra command area in south Punjab and north Haryana, Malnad in Karnataka and Wynad in Kerala. Increased irrigation and agricultural productivity provided stimuli for growth of market towns, agro-industries in towns and large inflows of rural households to towns in these areas.

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The strategic north-eastern part of the country showed also rapid urban growth due to (a) new development activities like oil exploration and its refining and new road constructions giving fillip to forest based industries. This was aided by large scale migration from neighbouring countries and outside the region also.

The metropolitan cities with their expanding industrial urban concentration further added to population increase during 1961—71. The overspill of industry from Delhi to NCR, from Bombay to mainland area were notable. The industrial growth in Ahmedabad, Bangalore, Madras, Pune and Hyderabad was remarkable mainly due to expansion of existing industries and establishment of new public sector industrial plants.

Practically all union territories showed rapid urban growth, due mainly to liberal central funding and financial assistance for developmental activities.

The rapid pace of urbanisation during the decade thus was experienced by regions which have the following characteristics—

- (i) resource rich areas with mineral based heavy industrialisation,
- (ii) newly reclaimed and irrigated lands where agriculture production and agro-based industries developed, and
- (iii) the metropolitan cities and their peripheral zones, and the union territories with increased developmental activities.

In contrast the hill towns in western Himalayas where industrialisation is practically non-existent and only administrative functions exist showed a sluggish to stagnant urban growth. Similarly those areas where industrial base was lagging such as the Bihar plains, Rajasthan desert area, and the Ganga Plains of U.P. showed also slow growth. On the other hand, the process of urbanisation was not fast in progressive areas like Punjab, Saurashtra in Gujarat and Tapti valley in Maharashtra, and northern Karnataka where commercial agriculture had developed. This was due to an effective decentralisation of urban functions like grain Markets, banks, schools and hospitals to rural areas and the emergence of new rural service Centres.

During the decade 30.2 millions was added to the country's urban population which was the biggest so far for any decade. Natural increase accounted for nearly two-thirds of the gain migration accounting for only one thirds.

The area difference in growth pattern of towns by size categories reflected that the cities grew out at the

cost of smaller towns and in their growth the migration component had contributed a much larger share than the national average.

(c) Urbanisation 1971—81

The process of urbanisation accelerated in the decade with urban population increasing to 159.7 million in 1981 from the 109.1 million in 1971. An absolute increase of 50.6 million in a decade was the biggest urban gain for any decade since 1901.

The urban growth rate increase to 46.1 per cent as compared to the 38.2 per cent in 1961-71. The URGD further widened almost all over the country. The urban population component to total population jumped from 19.9 to 23.3 per cent during 1971-81.

During the decade the birth rate (annual) declined from 40 to 34 and the death rate from 18 to 14 per thousand, resulting in a natural increase of 20 per cent thousand per annum or 20 per cent for the decade. Thus the natural increase actually contributed less than half of the total urban growth (46.1%). Thus in contrast to the situation in 1961-71 the major chunk of urban gain during the decade was by rural-urban migration. The trend for rapid urbanisation had set in.

The rural-urban migration was estimated at 28 million during this decade. Migration from rural areas followed mainly two paths—(i) to urban places in the region of green revolution (ii) to Metropolitan cities outside the migrant population's rural region.

Thus, saturation in labour absorption capacity of agriculturally advanced region like Punjab, Haryana, Western U.P. on the one hand stagnation of agriculture on the other in a number of eastern and central regions contributed to the rural-urban migration and rapid urban growth.

Increased employment opportunities in urban places generated by industry and service sectors, expansion of administrative machinery and infrastructure facilities particularly at large towns and cities, added to the pull factors for migration. Besides, the government investments and flow of finances towards urban housing, creation of new mandi and satellite towns boosted construction activities which was also one of the main attraction for the rural migrants.

A notable feature during the decade is the designation of 858 settlements as new towns in 1981 by the Census authorities. This contributed about 0.5 million to the urban population totals of the decade. The urban places also increased from 2636 to 3245 in 1981 comprising all towns/urban agglomerations. The increased population in urban place and addition of new towns (by census) resulted in an increase of

land area under urban settlements from 43,425 km² in 1971 to 53,183 in 1981, a significant increase indeed.

This decade showed several significant features of urban growth in different categories of towns, not seen in earlier decades. Every second town had a growth rate of more than 30 per cent. Less than 1/10 of the towns recorded a slow growth of less than 15 per cent. Amongst different size categories, from Class I to Class IV showed a decennial growth rate above 38 per cent. In relative terms cities grew fastest with their number increasing to 216 in 1981 from 148 in 1971. Their population nearly doubled from 53 million in 1971 to 93 million in 1981. The metropolitan cities increased to 12 in 1981 from 9 in the previous decade having in all 41.5 million or in other words more than 1/4 of the total urban population.

In spatial patterns of urban growth this decade provides many interesting features.

- (i) Firstly cities in north India grew faster than those in south India. This was due to intensified rural-urban migration in north India under conditions of rise in natural increase of rural population.
- (ii) The regional disparities in urban growth showed a perceptible decrease although the inequalities in per capita income at states level increased.
- (iii) The tribal/hill development districts of Rajasthan, M.P., U.P., A.P. and the states and UT's of north-eastern region recorded a fast urban growth. This was mainly due to expansion of administrative towns in the area.
- (iv) The continuing impact of heavy investment in mining, mineral based industries and related infrastructure in the north-eastern peninsular region, comprising eastern M.P., Western Orissa and Southern Bihar, retained the tempo of rapid urban growth in the region. The urban growth rate in the districts ranged between 40 to 140 per cent.
- (v) All the union territories continued their rapid urban growth due to continued overall developments in them through liberal central investments and financial assistance.

The districts surrounding the Metropolitan cities showed also rapid urban growth mainly due to latter's horizontal expansion and over-spill into adjoining territories. The evident spread effects of industrial concentration in them, and the high disparities in land prices, urban development controls both within and outside corporate limits also contributed to the phenomenon.

During the decade a variety of factors determined urbanisation in different regions. At the national level regional disparities in urbanisation appeared declining as more than 80 per cent of the districts showed an urban growth of 30 + percent.

Classification of Districts by Urban Growth 1971—81

Growth rate (%)	No. of districts		Percentage in total Distts.	
	61-71	71-81	61-71	71-81
60+	82	127	23.6	32.7
30-60	175	186	49.7	48.0
15-30	73	40	20.7	10.3
Less than 15	6	58	1.7	2.0
Decrease	3	3	0.9	0.8
Entirely rural	12	24	3.4	6.2
Total	388		100	

313 districts out of 388 (for which data are available) showed an increase of 30+% urban growth.

However the urban growth rate in about 75 districts was less than 30 per cent. These were scattered amongst Tamil Nadu, Kerala, Maharashtra, Gujarat and West Bengal and in rural parts of North-Eastern region.

Kerala and Tamil Nadu had slow urban growth rates due to decline in natural increase and considerable outmigration from them during the decade. In the other states namely Maharashtra, Gujarat and West Bengal certain districts were very less industrialised and remained backward. These lost migrants from both rural and urban sectors resulting in slow urban growth.

A notable feature of the decade is the narrowing down of growth rate among different size categories of towns, though the cities displayed high growth rates.

(d) Spatial Ecotones of Urbanisation

This far we have analysed the temporal spatial patterns of urbanisation during the last three decades. The pace of urbanisation was fast in some places, sluggish to slow in few others and stagnant in many. Irrespective of this symptomatic signals, it is clear that the spatial patterns of urban centre distributions in the geographic space of the country was essentially due to local specific regional influences.

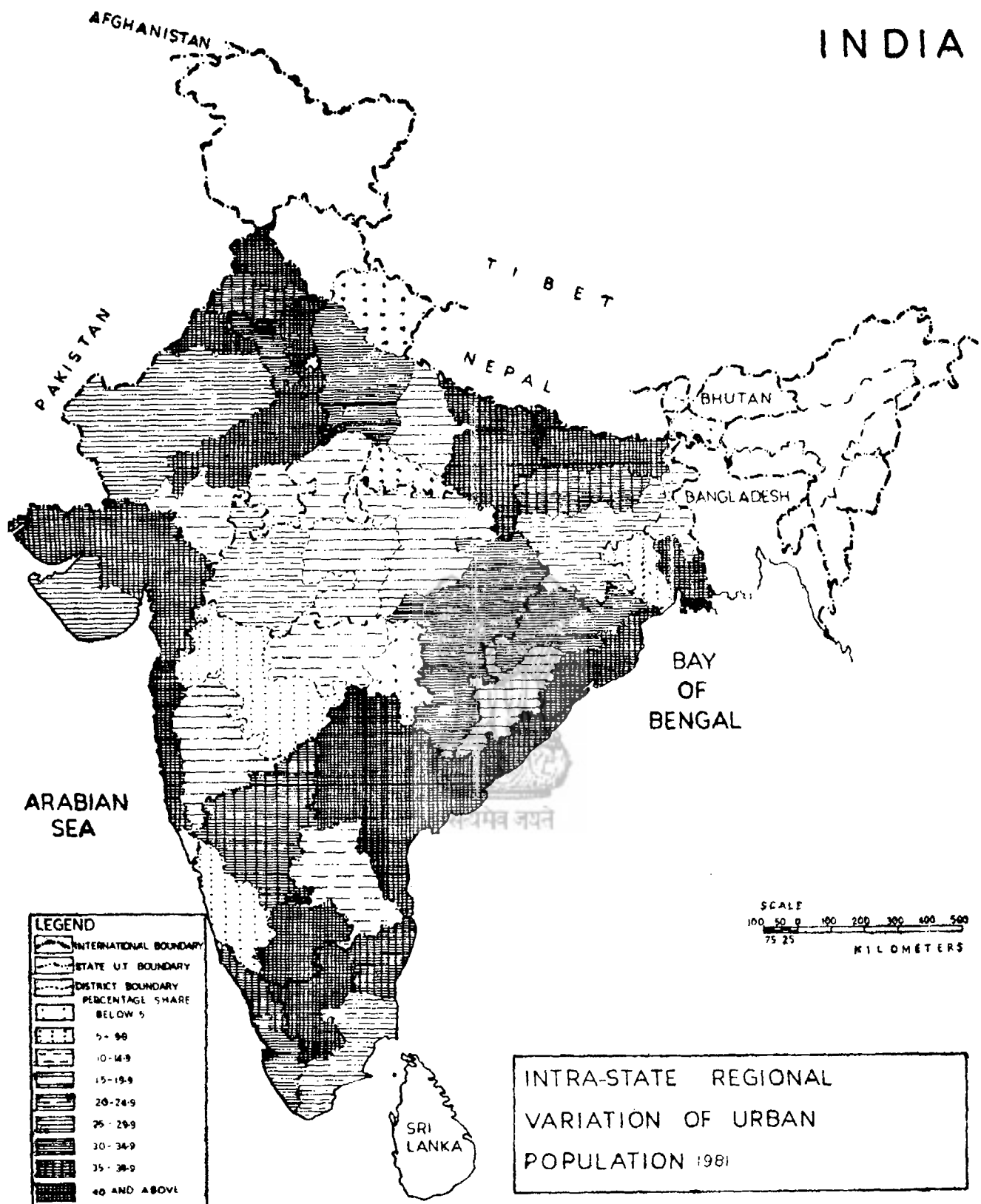
Several studies on regional patterns of urbanisation in the country are available but they are mainly related to identifying areas of similarity in urbanisation characteristics. They do not distinguish the functional influence of a dominating-urban centre and its role in such regionalisation through a network of

hierarchy of urban systems. Majority of the literature on regionalisation or urbanisation are oriented to population potentials or rank size analysis of Indian cities and towns. The measure of degree of urbanisation purely on percentage of urban population does not reveal much about spatial distribution causes, nor the rank-size classification or urban areas and their geographic location. It would, therefore, be essential to look for area criteria like density of towns say in 1000 sq. kms. (or a district) and number of towns with 20,000 and above population in them, and density of urban population in the said area.

An analysis on the above consideration indicates that about 92 districts had high level of urbanisation. Out of which about 21, mostly having big industrial concentrations, showed consistently fast urban growth (in the past three decades). Interestingly these included the Metropolitan districts of Ahmedabad, Bombay, Delhi and Pune and other industrial districts like Rajkot, Twenty Four Parganas, Nasik, Thane, Dhanbad, Singhbhum, Alleppey, Ernakulum, Kozhikode, Indore, Ludhiana, Burdwan, Darjeeling and Krishna. These districts are scattered all over the country but have a common feature or high level of industrial concentration, heavy inflow of capital investment and migrant labour, and ready availability of power, and a variety of industrial-urban infrastructure and facilities.

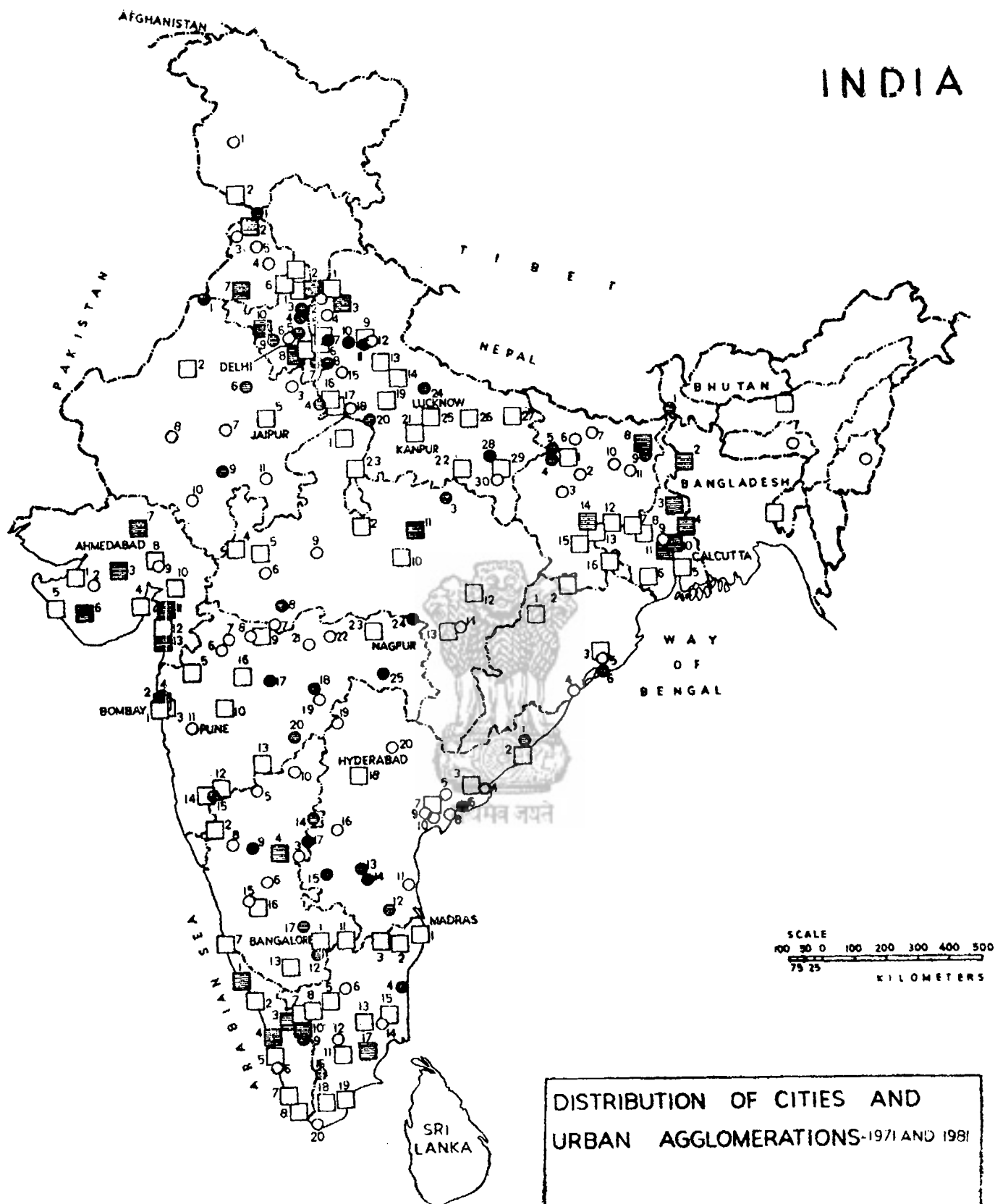
31 districts which had high level of urbanisation had fluctuating trend of urban growth. In this category many of the erstwhile capitals of princely states which gained industrial and trade momentums due to post-independence policies are included. Some of them are also situated in agriculturally prosperous areas. In the former category are Hyderabad, Srinagar, Jammu, Kolhapur, Gwalior, Ujjain and Bhopal. Related to agriculture prosperity are East Godawari, Guntur, West Godawari, Amritsar, Gurudaspur, Jullunder, Kapurthala in the wheat, rice and cotton belts. Notable industrial developments occurred in Madras, Chingleput, Madurai, Nilgiris, Hooghly, Howrah, Nadia, Dharwar, Kanpur, Dehradun, Surat, Valsad, Trichur, Trivandrum, Cannanore and Patna districts. In other extreme category are thirty eight districts which having high level of urbanisation showed slow or sluggish urban growth. These were mainly located in coastal plains and their hinterlands or erstwhile European colonies and had a previous history of high level of urban development, but could not sustain the tempo in the post-independence period.

In the coastal plains are North Arcot, Ramanthapuram, Thanjavur, Tiruchirapalli, Tirunelveli, Calcutta, Bhavnagar, Junagadh and Keda. The hinterland and interior areas are covered by the entire

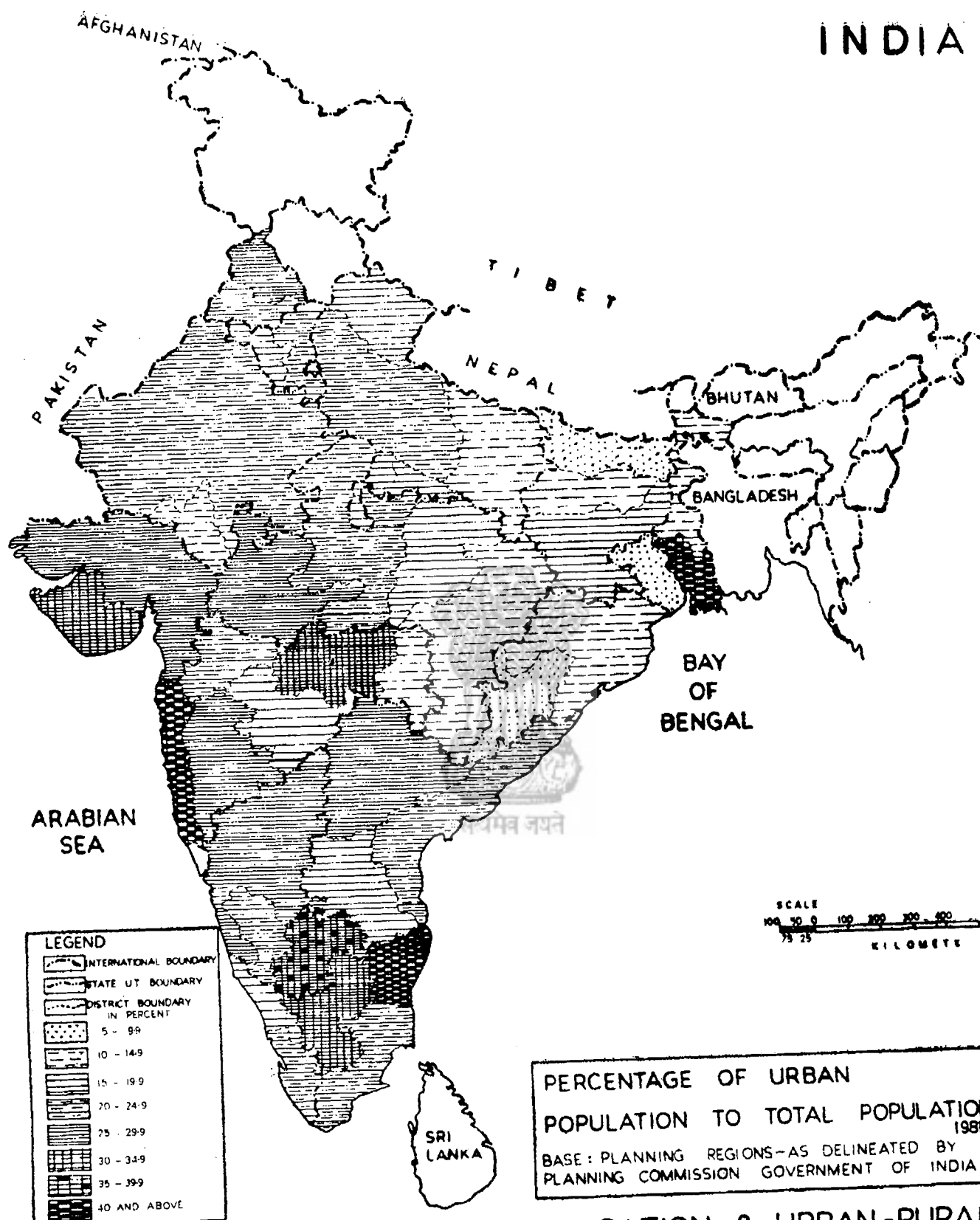


REGIONAL VARIATIONS IN URBANISATION & URBAN-RURAL RELATIONSHIP

INDIA



INDIA



REGIONAL VARIATIONS IN URBANISATION & URBAN-RURAL RELATIONSHIP

western Uttar Pradesh, Ambala, Gurgaon, United Khasi and Jaintia Hills. Bhatinda, Patiala, Ropar, Sangrur, Ajmer and several union territories of erst-while Portuguese and French vintages.

Similar distinctions can be made with moderate and low levels of urbanisation. With moderate level of urbanisation thirteen districts showed fast urban growth, 36 districts with fluctuating urban growth and 51 districts with sluggish urban growth. In general these were all scattered all over India and exhibited the dependence on "Plan" interventions to boost agricultural or industrial economy. A prominent feature of the first category of fast urban growth districts was their consistent developments in the urban and rural sectors of the economy. In the fluctuating growth districts their sensitivity to modernisation and industrialisation were yet to come to the force prominently. The sluggish growth oriented districts exhibited the lack of industrial development and district fluctuations of agricultural economy in them.

The scenario in low level urbanisation districts is interesting. Despite consistently fast urban growth in 13 districts there was low level of urbanisation. These were mainly having newly developed mining industries. Their impact on the district as a whole was yet to be felt as these were mainly a post independence phenomena. 55 districts showed fluctuation in urban growth and these were mainly located in tribal and undeveloped regions of the country, but rich with natural resources. The functions were more related to improvements to agriculture such as in Chambal Valley, Orissa high lands, Telengana and Southern Madhya Pradesh areas.

95 districts showed sluggish urban growth. These constitute nearly one-third of the total districts in the country and in which there is a low level of urbanisation with almost stagnant urban growth. Mainly they can be considered in two categories (i) Districts of difficult terrain, harsh climate and poor soils. For example, western Himalayas, North-Eastern tribal regions, Rajasthan desert and several partly inhabited areas in central India; (ii) The Middle Ganga plain comprising eastern Uttar Pradesh and North Bihar. Practically all these districts have high concentration of population, little or no industrial development and poor agricultural development.

From the above scenario the broad conclusions that emerge are :

- (a) The coastal India is more urbanised than the interior.
- (b) Southern India and its peninsula is more urbanised than the North India although population densities are high in the latter.
- (c) The newly developed rich agricultural belts showed faster urban growth.
- (d) The thickly populated areas with low agricultural productivity and other sparsely populated areas showed a sluggish urban growth.
- (e) The Himalayas, the central tribal belt and the Rajasthan desert continued to be the least urbanised parts in the country.
- (f) The entire Middle Ganga Plain is still impoverished both agriculturally and economically and has a very sluggish urban growth although thickly populated.

6

Rural-Urban Relationship and its Impact on Regional Distribution of Urbanisation

Urbanisation is a continuous process of transformation of rural communities for performing a variety of functions that are beneficial to both rural and urban population. The scale of operation and concentration of variety of these functions, generally, defines the hierarchy of a settlement in a regional system.

For fulfilment of social and economic needs, the rural communities, generally, interact with other communities which depending upon specific situations, may be rural or urban. This interaction, in cases of smaller and bigger communities, leads to formation of regional communities which generally contain a central urban area and the surrounding villages. The boundary of such a region depends upon the size of the central urban area the bigger and more complex the urban area the larger is the corresponding region embracing within its boundary several rural and urban groups. The boundary of the influence region of a metropolitan centre will therefore, contain big and small towns and central and other villages.

As a general principle, all the settlements in a region should be set in a hierarchical pattern performing a specific function and helping in the process of inter-community interaction and inter-dependency. There is thus a continuum of communities that stretches from the smallest village to the largest metropolis as referred to below :

METROPOLIS

Sub-Urbs	City (Large Town)
	Medium size Towns,
Rural-Urban Village	Small size Towns,
Central Village	
Primary Village	

The primary village can be considered as smallest, organised physical unit in the regional system of settlements. The people in this are engaged in agricultural production of food and other raw materials. The surplus agriculture produce, is sold at the central villages and other higher order settlements. The

intensity and the scale of a variety of functions that are found in the higher order settlements naturally goes on increasing with the increase in their hierarchical level.

Towns, cities and metropolitan centres, on the other hand, serve the region with secondary and tertiary sector employment, specialised financial and administrative institutions and health, educational and recreational facilities.

The suburbs provide residential accommodation to workers in the metropolis and tertiary sector employment to rural migrants.

The rural-urban villages, generally located at the fringe of urban centres are places experiencing a constant (and rapid near cities and metropolitan centres) changes in their land use pattern. Here agricultural production is intensive, services are inadequate and the population is mobile.

The state or rural-urban continuum in India is unbalanced. Class I and Class II cities are growing in numbers while the number of settlement in class II and below category is declining. During 1961 to 1981 the number of Class I cities has increased from 102 to 216 (more than 100 per cent). The corresponding figures for class II cities is 129 to 270, again an increase of more than 100 per cent. This trend of convergence of population at only upper level appears to be due to the lack of a urbanisation policy and perhaps due to faulty industrial local patterns.

Considering the need for accelerated industrialisation at this stage of national development and urbanisation that follows economic development the basic issues related to rural-urban relationship are :

- (a) How to achieve level of industrialisation and urbanisation without adversely affecting the quality of life in rural areas ?

- (b) How to deal with rural transformation with specific reference to the changes in occupational pattern and the resultant geographic movement (migration) of rural population to the employment centres?
- (c) How to achieve a desirable inter-community, inter-action and inter-dependency leading to a rational rural urban continuum?

The Existing Scenario

About 80 per cent of population of India lives in about 600,000 villages. The rural population in the country is experiencing a variety of socio-economic problems which are as follows:

- (a) Socio-cultural tensions
(b) Rural-urban disparities,

Socio-Cultural Tensions

The rural society in India, continues basically traditional-ridden society where cast, class and sex are still the most dominant factors that guide the rural life style. Social and religious beliefs play a major role which have in many cases acted adversely to their economic development.

This, however, is only a generalised picture of rural areas in the country. There are a number of regions where rural settlements are experiencing wide ranging changes. Whether you talk of villages in prosperous Punjab or Haryana or villages near large industrial complexes or large cities or even in remote rural areas of Kerala or Bihar where the petro dollars are flowing in. In all these significant socio-economic and physical transformations are taking place. Their functional links with the nearby towns are being strengthened. But at the same time the relations of economic exploitation and social oppression between the communities in the rural areas have sharpened over years and its impact is seen in the small towns. This is mainly due to the increasing differentiation between the cultivating classes, the increasing marginalisation of the rural poor and their separation from their life supporting resources, coupled with the growing upward mobility of the middle and top layers their struggle to monopolise economic and political power. All this together is bringing new pressures on the villages and their traditional modernisation and development. But this transformation is not a simple one in many these processes of disruption and reordering have taken violent forms very adversely affecting the patterns of social change and their political expression. The best example is Bihar, South-Western West Bengal, Western A.P. etc. All these have also very significantly affected the rural-urban relationship in these areas. Either the rural settlements have been

totally alienated from the towns or those have become the colonial extensions of such towns.

Rural-Urban Disparities

There exists a wide gap at the level of services and amenities between the rural and urban areas. There is also a big gap between the prevailing wage structure in urban and rural areas which is creating a vacuum in rural areas as far as supply of labour is concerned.

The level of essential services available in most rural area is also very low. At an average only 30 per cent of the rural population is served by protected water supply (see Table 1). More than 70 per cent households depend upon wells, lakes and ponds for supply of drinking water the quality of which is sub-standard. These sources of water, in some cases are located several kilometres away from the village.

Uttar Pradesh, the largest state in the country, is the worst case where only 7.20% of its rural population is served by protected water supply.

TABLE 1.
Percentage of Rural Population covered under Water Supply Service under Sixth Plan

S. No.	State/Union Territory	Percentage to Total Rural Population of the State benefited by Water Supply as on 31-3-1981
1	2	3
1.	Andhra Pradesh	41.50
2.	Assam	19.90
3.	Bihar	69.40
4.	Gujarat	70.28
5.	Haryana	27.30
6.	Himachal Pradesh	46.35
7.	Jammu & Kashmir	36.40
8.	Karnataka	31.30
9.	Kerala	28.41
10.	Madhya Pradesh	30.14
11.	Maharashtra	19.19
12.	Manipur	24.45
13.	Meghalaya	19.60
14.	Nagaland	67.21
15.	Orissa	31.31
16.	Punjab	20.12
17.	Rajasthan	35.26
18.	Sikkim	23.64
19.	Tamil Nadu	20.57
20.	Tripura	40.29
21.	Uttar Pradesh	7.20
22.	West Bengal	15.79
23.	A. & N Islands	53.1
24.	Arunachal Pradesh	64.58
25.	Chandigarh	—
26.	Delhi	56.80
27.	Dadra & Nagar Haveli	44.04
28.	Goa, Daman & Diu	22.98
29.	Lakshadweep	8.50
30.	Misoram	32.00
31.	Pondicherry	70.05
	Total	30.03

Most of the states in the country do not appear to consider rural sanitation as an important component of living standard and, therefore, do not have any programme of improvement of sanitary conditions in the villages. Only five states (Assam, Bihar, Gujarat, Kerala and Tamil Nadu) have given some attention to this problem (Table-2).

TABLE 2

Percentage of Rural Population provided with Sanitation Services under Sixth Plan

Sl. No.	State/Union Territory	Percentage to the Total Rural Population benefited by Sanitation as on 31-3-1981
1	2	3
1.	Andhra Pradesh	—
2.	Assam	1.00
3.	Bihar	3.91
4.	Gujarat	0.23
5.	Haryana	—
6.	Himachal Pradesh	—
7.	Jammu & Kashmir	—
8.	Karnataka	—
9.	Kerala	0.47
10.	Madhya Pradesh	—
11.	Maharashtra	—
12.	Manipur	—
13.	Meghalaya	—
14.	Nagaland	—
15.	Orissa	—
16.	Punjab	—
17.	Rajasthan	—
18.	Sikkim	—
19.	Tamil Nadu	0.18
20.	Tripura	—
21.	Uttar Pradesh	—
22.	West Bengal	—
23.	A & N Islands	—
24.	Arunachal Pradesh	—
25.	Chandigarh	—
26.	Delhi	—
27.	Goa, Daman & Diu	—
28.	Dadra & Nagar Haveli*	—
29.	Mizoram	—
30.	Pondicherry	—
31.	Lakshadweep	—
Total		0.53

*Figures in respect of Jammu and Kashmir and Dadra & Nagar Haveli are yet to be finalised

About 70% (21 out of 30) states and Union territories have varying degree of housing shortage in rural areas. Bihar is worst case where the number of additional housing units required in rural settlements is more than 3.5 million. It is followed by Assam (2.64m), Uttar Pradesh (2.39m), Madhya Pradesh (1.46m), Andhra Pradesh (1.03m) and West Bengal (1.02) (Table 3).

TABLE 3

Rural Housing Shortage in various States in India-1980

Sl. No.	State/Union Territory	No. of additional Housing Units required in rural settlements (in '000)
1.	Andhra Pradesh	1,031
2.	Assam	2,646
3.	Bihar	2,597
4.	Gujarat	476
5.	Haryana	Neg.
6.	Himachal Pradesh	Neg.
7.	Jammu & Kashmir	203
8.	Karnataka	756
9.	Kerala	101
10.	Madhya Pradesh	1,463
11.	Maharashtra	681
12.	Manipur	Neg.
13.	Meghalaya	156
14.	Nagaland	87
15.	Orissa	634
16.	Punjab	Neg.
17.	Rajasthan	382
18.	Sikkim	Neg.
19.	Tamil Nadu	287
20.	Tripura	112
21.	Uttar Pradesh	2,393
22.	West Bengal	1,021
23.	A & N Islands	12
24.	Arunachal Pradesh	43
25.	Chandigarh	Neg.
26.	Dadra & Nagar Haveli	7
27.	Delhi	Neg.
28.	Goa, Daman & Diu	13
29.	Lakshadweep	Neg.
30.	Pondicherry	Neg.

Considering the national average, only 26.50% of the villages in the country are connected by all weather roads. (Table-4). Only 3 states, Kerala, Haryana and Punjab have good accessibility in rural areas. Uttar Pradesh and Orissa have very bad situation where only 8.1% and 1.3% villages are connected by all weather roads respectively.

TABLE-4

Percentage of Villages connected by Rural Roads in various States in India 1981

State/Union Territory	Percentage of villages connected by all weather roads.	State of affairs
Andhra Pradesh	38.9	Fair
Assam	46.0	Good
Bihar	28.3	Fair
Gujarat	37.7	Fair
Haryana	98.5	Excellent
Himachal Pradesh	37.9	Fair
Jammu & Kashmir	53.8	Good
Karnataka	27.5	Fair
Kerala	100.0	Excellent
Madhya Pradesh	10.9	Bad
Maharashtra	26.7	Fair
Manipur	20.0	Bad
Meghalaya	47.8	Good
Nagaland	60.0	V. Good
Orissa	1.3	V. Bad
Punjab	96.7	Excellent
Rajasthan	15.9	Bad
Sikkim	—	—
Tamil Nadu	50.0	Good
Tripura	20.4	Bad
Uttar Pradesh	8.1	V. Good
West Bengal	44.4	Good
Union Territory	20.4	Bad
	26.5	Fair

Source : Rural Development Statistics-1982, NIRD, Hyderabad pp. 220-227.

Criteria for classification of State of Affairs.

10% and less	Very Bad	41—55	Good
11—25%	Bad	56—70	Very Good
26—40%	Fair	71 and above	Excellent.

Considering the electricity supply it is noted that at an average only about a-half of the total number of villages are served by the utility. Himachal Pradesh, Karnataka and the Punjab are the only states where all the rural areas are served with electricity (see Table 5).

TABLE-

Percentage of Villages electrified in various States in India-1982

Sl. No.	State/Union Territory	Percentage of the total number of Villages electrified
1.	Andhra Pradesh	70.5
2.	Assam	30.3
3.	Bihar	34.2
4.	Gujarat	73.5
5.	Haryana	100.0
6.	Himachal Pradesh	66.3
7.	Jammu & Kashmir	76.0
8.	Karnataka	65.7
9.	Kerala	100.0
10.	Madhya Pradesh	40.9
11.	Maharashtra	80.6
12.	Manipur	20.3
13.	Meghalaya	18.9
14.	Nagaland	45.7
15.	Orissa	42.6
16.	Punjab	100.0
17.	Rajasthan	48.7
18.	Sikkim	21.2
19.	Tamil Nadu	99.2
20.	Tripura	25.2
21.	Uttar Pradesh	42.2
22.	West Bengal	42.8
	Total State	51.2
23.	A & N Island.	37.2
24.	Arunachal Pradesh	14.5
25.	Chandigarh	100.0
26.	Dadra & Nagar Haveli	80.6
27.	Delhi	100.0
28.	Goa, Daman & Diu	91.4
29.	Lakshadweep	90.0
30.	Mizoram	24.0
31.	Pondicherry	100.0
	Total (UTs)	35.7
	All India	51.1

Source : Central Electricity Authority.

The above figures show the enormous disparities in the quality of life inspite of increase in the economic growth and national income. Growth in gross national product do not, therefore, necessarily reflect the rise in the standard of living. This calls for a greater emphasis on the physical improvement of the rural environment (both natural and man-made) and living standards.

One of the major causes of widening the gap between rural and urban areas is the lack of recognition

given to the local traditional skills like village blacksmith, silver-smith, the tanner, the cobbler, the potter, the carpenter, the weaver, the 'Dai' (maid), the Vaid, the Hakim, in the developmental efforts at the grassroot level.

The striking gap in the quality of life between the rural and urban areas is one of the causes of large scale rural-urban migration particularly to the large cities which are growing at a very fast rate. Slow growth of small and medium size towns has contributed to the widening gap in the rural-urban continuum.

This state of affairs has increased the gap between the elite and the masses. The general rural living environment in greater parts is far from what is desirable. The rural youth does not find the rural environment attractive—and hence tends to migrate to urban areas particularly to the large ones which are again unable to absorb them. The main causes of this situation are :

- (a) Lack of proper diversification of occupation in rural areas.
- (b) Neglect of market towns and faulty market mechanism.
- (c) Poor economic base of small and medium size towns.
- (d) Slow adoption of appropriate technology in improving the quality of life in the rural areas.

No rational regional approach is taken in selecting and developing the market towns. The choice of these centres is generally arbitrary. No physical planning considerations are applied at the time of their design and the result is that these centres lack regional linkages, accessibility and other facilities like storage, loading-unloading, banking. The market mechanism is also not very encouraging. The middle man is still the biggest game. The farmer is thus being exploited and certain other factors like mismanagement and corruption further add to his sufferings.

In a rational rural-urban continuum there is an integrated development of settlements at the levels of hierarchy. In India, at present even after the introduction of IDSMT programme, the economic base of small and medium sized towns in the country is very weak. In many cases it is unable to sustain its population. The result is that these settlements fail to serve their desired function in the regional system of settlements. They are unable to absorb the rural migrants. The level of development utilities, facilities and services is slow and, therefore, these centres are

unable to attract rural migrants. Cities and metropolitan areas are thus growing at a very high rate significantly adding to their housing and other infrastructure problems.

A lot of work is being done to alleviate the suffering of rural people in practically all fields and efforts are being made to implement various proposals including transfer of technology to the local population. But, in the absence of a rational approach to technology transfer, the rural masses are confused. In the same village, for example, different alternative sources of energy are provided and thus are made counter products.

In the absence of a proper urbanisation policy, indiscriminate development of rural land is taking place on the periphery of metropolitan centres which are experiencing fast population growth.

(a) *Governmental Efforts for Minimising Rural-Urban Disparities*

Through Five Year Plans, the Government of India has been consciously trying to bridge the gap between rural-urban disparities. The basic idea in the efforts of the Government is to minimise rural-urban disparities through social transformation involving educational development, growth in awareness and changes in outlook, motivation and attitudes.

The main thrust in the Governmental efforts has been poverty alleviation, employment and social justice. Several schemes under poverty alleviation programme have been introduced and implemented through five year plans. These include a number of schemes. The IDSMT programme which is aimed at augmenting the infrastructure base of small cities and thereby enable those cities to function as focal points of growth has also had upto now limited impact. Wrong priorities and the small scale operation of the programmes are the reasons.

1. Integrated Rural Development Programme (IRDP).
2. National Rural Employment Programme (NREP).
3. Rural Landless Employment Guarantee Programme (RLEGP).
4. Minimum Need Programme (MNP).
5. Training of Rural Youth for Self-Employment (TRYSEM) Programme.
6. Development of women and children in Rural Areas (DWCRA).
7. Integrated Rural Energy Planning Programme (IREPP).

With a view to improving the environment and quality of life the following programme which form part of some of the above programmes like MNP, RLEGP, NREP, and command Area Development (CAD) have been suggested by the Seventh Plan.

- (a) Rural Roads.
- (b) Rural Housing.
- (c) Safe Drinking Water.
- (d) Sanitation.

THE PROBLEMS OF PRESENT EFFORTS BY THE GOVERNMENT

The various problems relating to planning, and implementation of the Governmental programmes have been as follows :

- *Duplicacy of functions of various programmes.
- *Lack of co-ordination among various programmes and their implementation agencies.
- *Unsatisfactory qualitative and quantitative standards of facilities and services provided.
- *Lack of micro-regional approach for distribution Utility, facilities and services, and absence of spaced planning.
- *Lack of awareness among rural population about various projects, the procedures, rights and responsibilities.
- *Exploitation of ignorant people and corruption.
- *Lack of proper information base and faulty feedback systems.
- *Lack of result oriented approach in programme evaluation which is heavily dependent upon money allocated and disbursed.
- *Lack of public participation in the decision making and project implementation process.
- *Faulty concept of IRDP which concentrates on rural employment and does not attempts at integrating all aspects of rural development and also the different programmes and efforts of various implementation agencies.

POLICY RECOMMENDATIONS

- *Poverty alleviation activities and programmes should be integrated with all other rural developmental programme so as to achieve an over-all development and urban-rural continuum.
- *Integrated District Development Plans (IDDP) should be prepared for each district which should be co-ordinated with five year plans for investment and financial allocations.
- *The IRDP should clearly show the settlement pattern, hierarchy functional specialisation of settlements, transportation, network to enhance accessibility, and distribution of utilities, facilities and services. It should also identify the various operators in the development process and their specific area of responsibility. The operators include the District, State and Central Government Departments and authorities, voluntary organisation and the people.
- *The implementation of programmes should be in an integrated manner where the efforts and activities of various agencies, bodies and authorities like village Panchayat, Panchayat Samities Zila Parishad, Block Development Boards, Rural Electricity Boards, and the like are properly co-ordinated in a manner that maximises benefits at a given point of time.
- *The administration should be viewed as a setup and not merely a group of public officers.
- *Local voluntary organisations like social clubs, farmers associations, Youth Clubs/Societies should be encouraged to participate in rural development efforts and they should serve a complementary role to governmental actions and efforts.
- *There is a need to diversify the economic base of rural areas by providing planned infrastructure, requisite training, credit, marketing and organisational linkages, extension and entrepreneurial motivation.
- *The rural local traditional skills should be recognised and fully developed to provide a strong, diversified, local skills and occupational structure.
- *In order to achieve a result oriented monitoring and evaluation system, it is recommended that an efficient information system be developed at District levels with relevant data for each village being available.
- *Gram Panchayats be made responsible to submit progress report on development programmes being implemented in their villages.
- *Well conceived programmes of public awareness and public participation should be implemented with the help of mass-media of communication.
- *Efforts should be made to improve the quality of life in rural areas.
- *With a view to protecting rural environment it is recommended that non-conventional sources of energy should be encouraged for development of an integrated rural energy system.

The Development Scenario

Generally, urban development is linked to economic development and it is a consequence of economic changes that take place in the country. However, the availability of natural resources and the resources use process that influence population agglomeration in different regions of the country directly determine the type of urban development or urbanisation in different regions. Regional disparities in natural endowments and spatial variations in conditions for agriculture and industrial activities influence not only population density but also their agglomeration in human settlements and thereby bring the regional disparity to a sharp focus.

In understanding urban development it is, therefore, necessary not only to look into the nature of different kinds of activities in the regional spread, but also to assess the influences of planned or deliberate development programmes undertaken. The task then would be to investigate how the regional pattern of urban growth (or urbanisation) and economic development conform to this concept of "mutually interactive" development of economy. In order to attempt such an analysis the time-frame of past thirty years is taken here in order to provide some pointers and determinants.

The contribution of urban economy to GDP and GNP and the urban growth ratio, have all been discussed in great detail in the Task Force reports of the Planning Commission of Urban Development and Housing, published in 1983. The significant point to note is that in all the five year plans programmes there is no discernible thrust to integrate rural development programmes with that of urban development nor with that of basic agriculture development along-with irrigation etc. Settlement planning in urban and rural sectors are being considered in two separate frameworks. Results analysis of any of the five-year plans, therefore, will only lead to a picture of gross inputs in different sectors of economy without providing any useful evaluative indices for increase in rural

or urban employment patterns. The only indirect indicator that provides a trend analysis is the shares of rural and urban economic NDP, GDP and GNP including the per capita incomes computed for different decades. In the absence of direct and reliable data one could evaluate the various impacts of development under the five-year plans by listing out the targeted (likely to be achieved) employments or aerial spread of such programmes to investigate any possible linkages that may have occurred.

Taking the agriculture sector first it may be noted that :

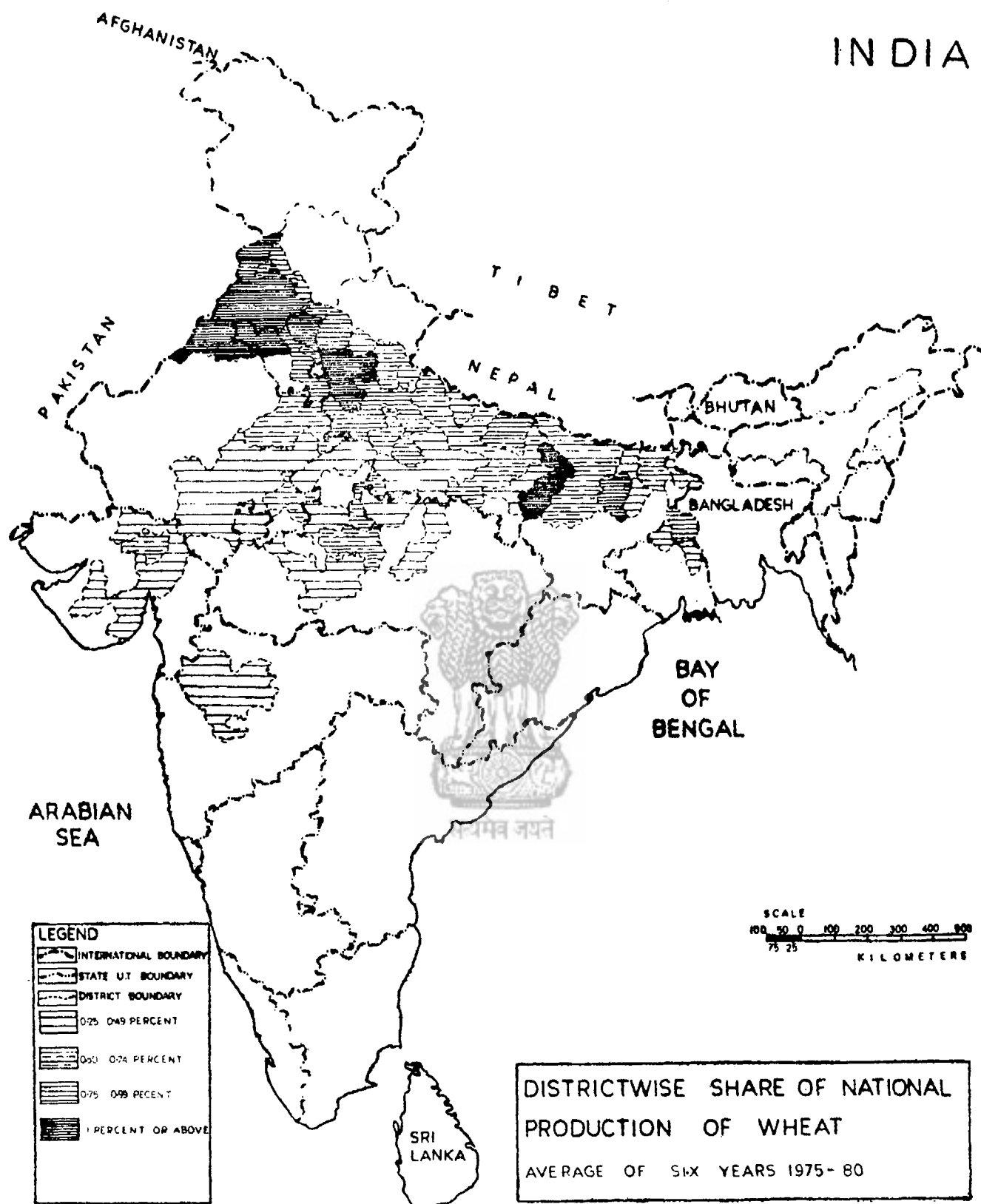
1. Twenty years ago 55 per cent of the GDP was being created by 70 percent of the labour force in agriculture. Today a similar 70 per cent (absolute numbers being larger) is creating only 35 to 40 per cent of GDP from agriculture.
2. The land under cultivation has not significantly increased over the past three decades. The total land under foodgrains by the end of Sixth five-year plan was 137.8 million hectares (an additional planned area under foodgrains targeted in the seventh five-year plan in the order of 11 million hectares).

The various rural development programmes which could have direct bearing on local (or regional) employment patterns, creation of assets, and indirect impacts on migration from rural to urban sector etc., have generally been started from 1979 and onwards.

These include such programmes like :

- NREP : National Rural Employment Programme.
- RLEGP : Rural Landless Employment Guarantee Programme.
- DPAP : Draught Prone Area Programme.
- DDP : Desert Development Programme.

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- SFDA : Small Farmers Development Agency.
 IRDP : Integrated Rural Development Programme.

In addition, various major irrigation programmes and multi-level development projects inclusive of Command Area Development (CAD) programmes should have also helped significantly in the creation of employment in rural sector which could reduce rural outmigration. Considering these it is noted that the rural development programmes though vigorously undertaken since 1979 have not been readily reflected in any significant way reduce the influx to the urban areas as is seen in the 1981 census. Nor the programmes have been effective in containing rural-urban migration in specific stress areas like the metropolitan regions not even in initiating the rural-urban disparity in terms of employment opportunities and per capita incomes generated in different sectors.

Under the circumstances the regional variation in urbanisation could be assessed only on the basis of examining the influencing factors and forces in the existing urban patterns in different regions. This could then be juxtaposed with the analysis of green revolution inputs in agriculture (in terms of shares of production of foodgrains), and developments of needed agriculture infrastructure on a factorial basis. Ultimately comparing the data of the districts with higher urbanisation (above national average in any one decade) with the factorial analysis one could come to some understanding of urban regional disparities. This methodology and approach would readily identify and indicate the following :

- (a) The investment profile in industry and policy decision for location of major industrial and irrigation programmes.
- (b) The population concentration in urban and rural sectors.
- (c) The impact of agricultural development especially the green revolution in terms of agriculture growth and per capita income.

These would provide indirectly the positive factors of rural-urban disparity at least at the district level and, thereby, would give an all the more important magnitude of rural-urban migration and consequently the urbanisation process that has taken place. To that extent this analysis would help with identifying the regional urbanisation process.

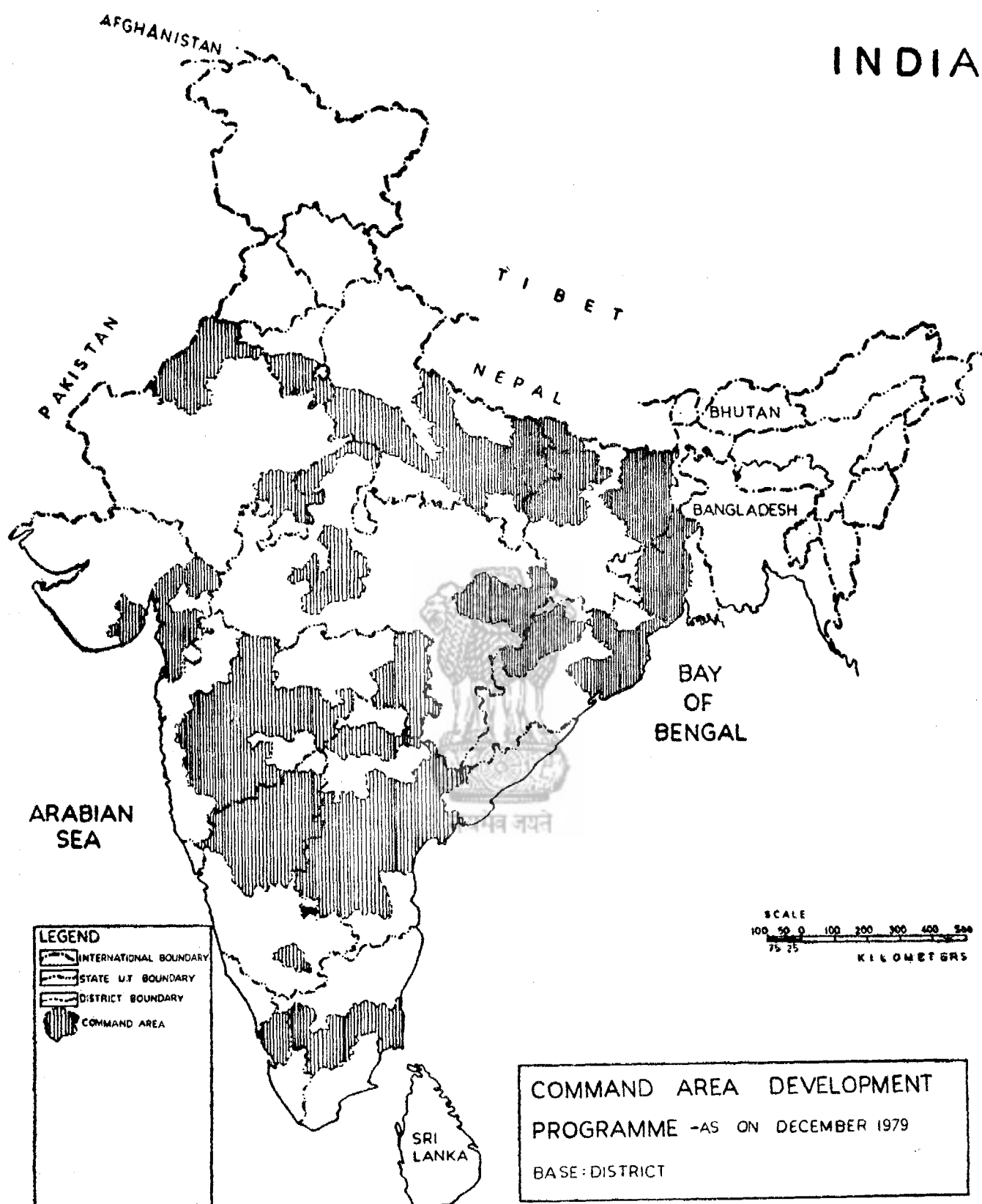
(a) *Spatial Distribution of Wheat and Rice Productivity and Industrial Employment*

To assess the level of achievements in green revolution and agricultural development in general one has to take into account a number of complexly

related factors. One common adopted method is the assessment of the per capita income in the agricultural sector. But again this has its own limitation. Here a simple exercise is attempted by assessing the share (in percentage) of each district of the national production of wheat and rice, there being the two major crops of green revolution. As may be seen in the Fig. p. 17, while wheat production is confined to the central and western parts of the Ganga Plain, northern and eastern districts of Rajasthan, northern and central districts of Madhya Pradesh and to Punjab, the rice production is exclusive to the eastern Ganga Plain, the eastern coastal plain, almost whole of Andhra Pradesh and Tamil Nadu, southern and western districts of Orissa and the southern and eastern districts of Madhya Pradesh. When one sees the regional spread of areas under command area programmes (refer Fig. page 39) one finds a different picture. New command areas are seen to cover Rayalsema in A.P., northern part of Karnataka and greater part of Vidarbha of Maharashtra. These areas are the lean areas in terms of wheat and rice production. But the trend of wider spatial spread is seen indicating that agricultural prosperity is likely to spread into the erstwhile agriculturally backward areas.

The pattern of spatial distribution of industrial employment (Fig. Page 41) reveals a more scattered pattern than that for rice and wheat productivity, however, one sees three clusters, though not very pronounced, in distribution of industrial employment. The first cluster is southern Punjab and north-west Haryana area, the second is the central and south Tamil Nadu and south-east Karnataka and the third cluster is the analysis of relationships between industrial concentration and urban growth presents a variant picture to that of agricultural prosperity and urban growth as described briefly above. It is clearly seen that the states which are industrially prosperous both from the points of value added and proportion of employment in manufacturing sector, namely Maharashtra, Tamil Nadu, Gujarat and West Bengal are again the most urbanised states also in that order. On the other extreme we also have seen that in erstwhile very lowly urbanised backward areas, where very significant investments have been made in industries, urban growth has been rapid this also clearly puts the pointer on the direct nexus between industrial investment and urban growth.

In this context let us see the impact of efforts at the central and state government levels to disperse industrial investments in favour of economically



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backward areas. Studies have confirmed some shift away from large cities. As regards employment, household industry tends to be more concentrated in relatively small towns where demand is small and is on simple manufactured products. As regards major industries there definitely has been a noticeable dispersal since the mid sixties. Considering the scale of industrial base in the country a quick dispersal is neither possible nor can be achieved without high costs. Therefore, the trend of dispersal which is already noticeable has definitely brought a relative dispersal in the spatial dispersal of urbanisation. Though as high as 247 districts accounting for 60 per cent of the population and 70 per cent of the area have been identified as industrially backward hence eligible for preferential incentives for investment, in reality, the Planning Commission reports that nearly 90 per cent of the commercial, industrial investment funds were to only 22 of the 247 districts and many of these again are in proximity to metropolitan cities. The effort of the National Council for Development of Backward areas to identify 100 industrial growth centres in order to achieve a better dispersal of industries regionally also has not met with significant results. However, dispersal policy of industries no doubt, has played a significant role in bringing about a better regional distribution of urbanisation. This is quite clear from the Fig. Page 41, which shows the dispersal pattern of the districts which account for sizeable industrial employment. Unlike the picture we get for the regional dispersal of agricultural productivity, the industrial distribution pattern is more widespread and rightly it should be.

Besides the factors like reclassification of urban centres, ad hoc extension of urban limits as discussed in the beginning chapters, varying levels of agricultural prosperity and also poverty and industrial growth have shown very positive co-relations with in regional variation in urbanisation. The maturity or viability of the urban existing settlement system determines the scale and pace of urbanisation in a given region. To illustrate this the case of Orissa, Assam, eastern UP and eastern M.P. and the northern and central Bihar can be a good example. These areas have the lowest levels of urbanisation which is a direct result of (a) widespread poverty of social and economic infrastructure and (b) very weak links of the rural economy with the regional or national economic system. While agriculture in all these areas is almost stagnant most settlements show unstable economic structure. In these circumstances no viable networks of urban centres have evolved. Even effective and viable centres are also far inadequate in number which can grow as

catalytic centres of social and economic infrastructure and help induce agriculture prosperity.

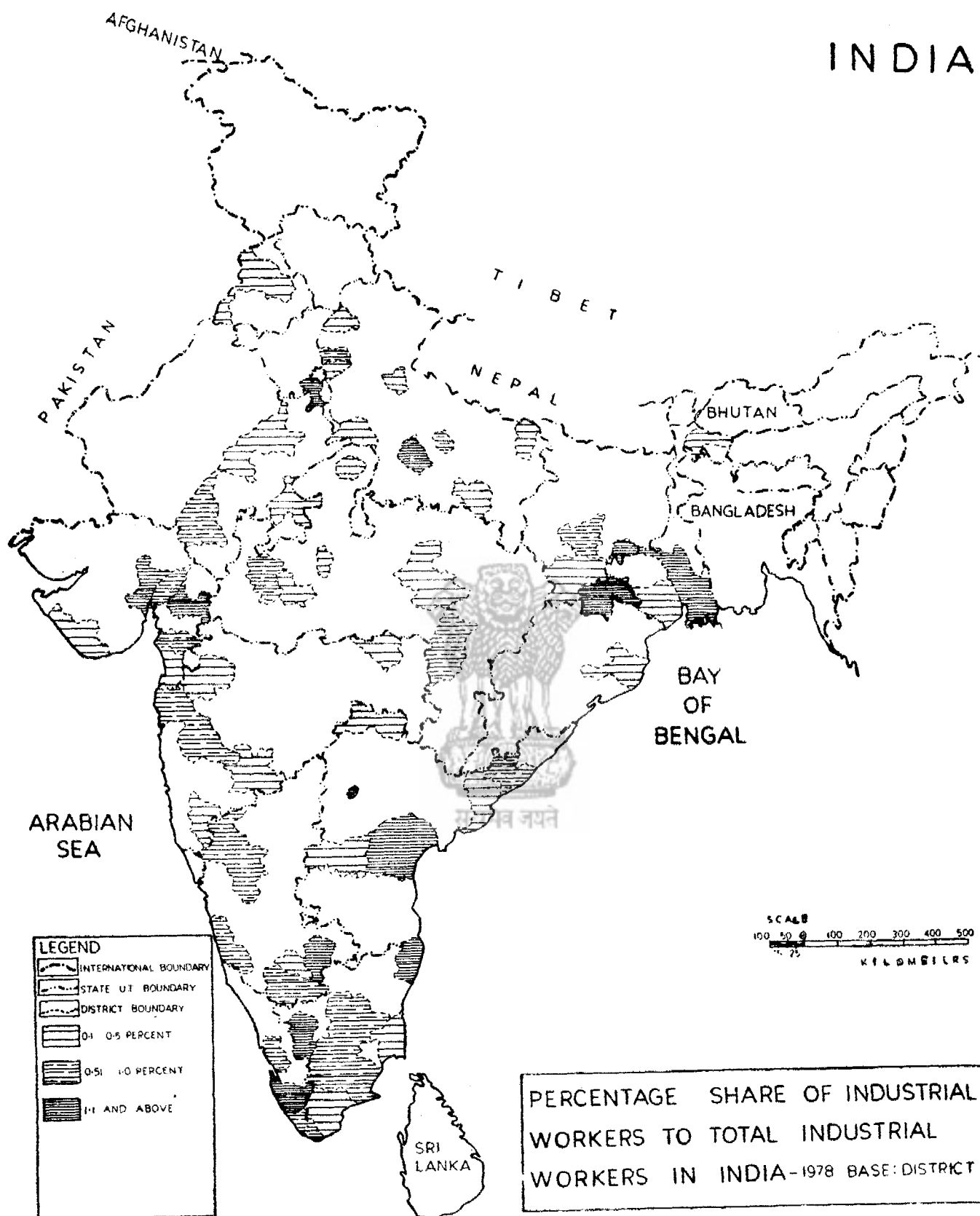
It is well realised that the growth of agricultural productivity, the spatial spread of industrial investments, and above all the basic genesis for a sustained economic growth in any region greatly depends upon the availability of an effective settlement system particularly a well connected network of viable potential centres of future growth in the region. The number of such centres and the level and strength of their inter-functional links in a hierarchy becomes the major determinants for effectuating regional spread of urbanisation. Areas which are poor in this aspect are also the areas lowest urbanisation.

Agricultural productivity growth is essential for the survival and growth of small towns which in turn lay the foundation for sustained levels of urbanisation. Industrial dispersal may just supplement the situation but cannot be the motivating factor.

(b) *Prospectives for 2001*

Most conservative estimates by today put the urban population figure around 320 million out of a total of 1000 million. An average of 7 million per year to urban population is expected until 1991 and then after to 8 or 8.5 million addition per year. The number of one million plus cities will almost double by 2001 and the same for cities would imply an increase of 50 per cent on its 1981 number. The population of million plus cities will significantly increase in absolute numbers but the proportion is expected to remain at 28 per cent, only one per cent more than the current figure. The towns with population less than 50,000 together are expected to accommodate 33 to 40 per cent of total urban population and their number would surely be much larger than now. It is, however, the growth and emergence of these less than 50,000 towns that are going to effect the regional variation of urbanisation significantly, not so much because of the total number of urban population those will accommodate but more because of their number and horizontal spread in space.

All these estimates referred to above have been made or accepted by the Planning Commission. Variations in the estimates and its spatial distribution, however, still will depend upon, amongst other factors, squarely on the fact that how much more employment is going to be generated both in rural and urban areas and at what rate. Besides a natural or normal process of urbanisation which results due to agricultural prosperity and the consequent demand on a variety of consumption goods and services, distress or forced



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rural to urban migration even urban to urban migration will continue to be a significant casual factor of urbanisation in the next 2/3 decades. Gravitation towards major focal metropolises and their region will continue for sometimes, though trends of growth of middle level centres (of which mostly are district headquarters) will accelerate.

Currently designated as lean or poorly urbanised (less than 10 per cent urbanisation) areas will significantly catch up with higher levels by 2001 but the relative regional differences in the levels of urbanisation may continue with the current picture. Either way, urbanisation levels and pattern will largely be linked to agricultural prosperity as nearly 65 per cent of the population would still be dependent on agriculture, though the contribution of this sector to the NDP will have reduced by over 30 to 35 per cent from 55.6 per cent level of 1981. Maximum proportional gain in urbanisation is expected in the central zone where of the present trends continue 36.3 million level of urban population in 1981 will have increased to 86.2 million registering an urbanisation level of 33.6 per cent. Presently low level urban areas

of eastern U.P. and eastern M.P. are included in this zone. In the northern zone which includes agriculturally prosperous areas of Punjab, Haryana and northern Rajasthan a very significant increase in urbanisation is expected by 2001. The agricultural prosperity and the strength of the existing settlement network system will enable an accelerated pace of urbanisation. But within the same larger northern region, intra regional variations in urbanisation will be heightened as the growth of urbanisation in J. & K., Himachal Pradesh and arid areas of Rajasthan is bound to remain low even in next two decades.

The western zone with Gujarat and Maharashtra will have almost doubled its urban population to reach above 60 million by 2001. But again the intra zone spatial variation is very significant with the Vidarbha and northern Gujarat areas being the lean areas of urbanisation. Though the hinterland of Bombay is adding urban population much faster (5.09) than the Bombay metropolis as was seen during 1971—81, the relative spatial imbalance within the region will continue.



In Summing Up

Analysis of urbanisation as a process in India during the last two centuries reveal two major characteristics; (a) since the last decade the country has entered a phase of rapid urbanisation which has no precedence. Though the overall urban component of the population remains much lower than that of even the least urbanised developed country, its massivity of numbers makes it unique. Furthermore, urban areas in India generally speaking, are emerging as the dominant contributor to the NDP and from this stand point, urbanisation becoming more and more desirable for economic development. (b) The spatial pattern of urbanisation as we see today is more a product of the British colonial period and history than of the policies and programmes of development followed after the country achieved independence. Urban development efforts through the last forty years of independence have not been able to significantly alter or modify the spatial urban pattern which had emerged during the British period. Trends of change, however, are now clearly discernible and one can expect that by the turn of the century, urbanisation will have a wider spatial spread than now and the emergence of new areas or rapidly growing areas will be faster. Yet the relative imbalance in the levels of urbanisation on a regional basis is not expected to reduce any significantly by 2001.

Two major types of new areas of urbanisation will have clearly emerged by even 1991 the trends of which have already been observed now. Agricultural prosperity will surely have a wider spatial spread in the next two decades and there will be significant increase in agricultural incomes leading to reduction of inter state inequalities in per capita SDP. In such areas which will include the irrigation command areas use of technology will create additional employment in the agricultural sector upto a level of saturation in absorption capacity of other sector. After this stage, as is experienced in Punjab, urbanisation will increase sharply. These areas will pose the problem develop-

ment of an effective functional network of towns and cities with adequate infrastructure base so that the potential for urban growth is not hindered. These areas will include Punjab, Haryana, Western U.P. and Northern Rajasthan as one category where labour absorption in the agricultural sector has almost reached its saturation and the period of spurt in urbanisation has begun with the increased demand for urban goods and services. The second category of such areas will be the newly emerging agriculturally prosperous areas namely, parts of eastern U.P., coastal and central Orissa and parts of coastal Tamil Nadu where technology adoption is still at a low key. The trend of urbanisation in these areas will continue to be on the accelerated side.

The second category of new areas of rapid urbanisation will emerge as the areas which are economically very backward but now is receiving heavy capital investments in industry. Agriculture in these areas is either stagnant or of very low productivity. These areas include parts of Eastern U.P. and Northern and Central Bihar, South Orissa, Eastern M.P. Part of the urbanisation in these areas has been due to reclassification of large number of villages as urban settlements as in Eastern U.P. and parts of North Bihar. But a major part of urbanisation is due to the distress migration from economically stagnant rural areas to the areas where industrial investments are taking place. These areas markedly suffer from absence of any economically or functionally viable settlement structure and the below subsistence level of economy has not helped the growth an effective network of towns. Hence, the major task in these areas will be to create appropriate impetus for a network of focal settlement by sharply augmenting accessibility, basic urban infrastructure and services especially markets.

The third category of new areas of rapid urbanisation will be the metropolitan areas and parts of

the metropolitan regions of some of the metropolises particularly Delhi, Bombay, Hyderabad and Calcutta. These areas have now registered a much faster growth, than the metropolis indicating outward spatial spread of concentration of urban population from the metropolis. Most of these areas, however, lie within two to three hours of travel time from the metropolis and a large number of people from these areas do commute and still work in the metropolis. For example the recent Planning Commission studies show that six towns in the immediate surrounding of Bombay together are growing at an average annual rate of 6.4 per cent while Bombay's corresponding figure is 3.2. Out of these Khapoli and Thane are growing at a rate higher than 7.6 per cent per year. Almost the same is true for the towns in the hinterland of other three metropolises mentioned above. Compared to the metropolises the weight of the urban populations of the hinterland towns, however, is very low. But the fact is that the spatial spread is taking place in the distribution of urban population in the hinterlands of major metropolitan cities. For this category areas of rapid urban growth the task is to strengthen the growth dynamics of the towns by adopting careful locational decisions regarding developmental investments particularly those relating to industries urban infrastructure and services. The aim should be to sustain their growth meaningfully and thereby achieve a greater spatial dispersal of urbanisation and reduction of pressure on the metropolises.

With these emerging changes in the spatial pattern of urbanisation, it is also worth noting that, urbanisation is going to be at a very low key in all the hilly areas of the Eastern Indian even much beyond 2001.

As regards industrial dispersal efforts the results till today are not yet very encouraging. Urban development and industrial development processes have practically been left unintegrated as it should be. In many instances industrial development has been made without any planning whatsoever to take care of the commensurating urban growth. In consequence only chaotic haphazard urban growth has occurred in these places. Development strategy of backward areas which is normally tied up with large scale preferential investment in industrial growth also needs to be effectively reoriented to achieve a more desirable regional dispersal pattern.

(a) *The Dualistic Economy*

It is a well known fact that when income increases in urban areas far exceeds that in rural areas, rural-urban migration is heightened. To a great extent this is the situation in many parts of the country,

particularly in those where agricultural development has been low or in those where economy has been constantly affected by natural calamities. In such areas invariably the quality of urbanisation (measured in terms of per capita income) has been very poor. Distress or push migration is dominant in these areas and the overall low level of economy also does not allow higher levels of urbanisation to be achieved.

Such a situation is also taking place in an indirect way, in areas where large number of villages have been reclassified as towns as in Eastern U.P. or the existing urban boundaries of small towns have been extended on purely ad hoc basis bringing large rural areas as parts of the town areas as is seen in many cases in Madhya Pradesh. In such cases the quality of urbanisation remains very low.

Studies have clearly shown that the ratio of urban per capita NDP to rural per capita NDP has increased regularly since independence and in 1981 it was 2.6. And it is also estimated that this disparity may continue to increase further in next 2/3 decades resulting in accelerated rural to urban migration. To counter such a trend, more vigorous pursuit of programmes and schemes related to rural employment generation must be followed and at the same time the wage policies also must reduce the existing urban-rural gaps. Deliberate strategies must also be adopted at the national as well as state levels to check the present rural based tertiary and secondary sector activities to urban areas and facilitate transfer of employment in rural areas from agricultural to non-agricultural pursuits. All these discussed above are going to have a direct impact on the patterns of regional distribution of urbanisation and the urban-rural relationships.

(b) *Spatial Planning of Settlements*

Many of the distortions or maladies in the regional distribution of urbanisation can be traced to a glaring lack of any meaningful spatial planning of settlements. Most efforts in this direction have concentrated only on urban areas and that too on large ones. Misconceptions, wrong priorities and above all poor urban management capabilities have hampered all achievements in these efforts. At area and regional levels the efforts in this direction have been particularly non-existent. Some attempts have been made to plan the spatial development of a number of metrocity regions, but in most cases, these plans have remained as innocuous paper plans. Even in the case of National Capital Region, neither a minimum desirable required finance has been made available for development of the region nor the plan targets are being set with realism.

In the areas of agricultural prosperity potential forces for urban growth are hindered due to poor functional network of small towns and market towns and also due to poor levels of urban infrastructure and services in such towns. In backward areas, the potential for urban growth being created through large scale industrial investments also remains greatly underutilised due to the absence of functionally viable nodal points and an overall lack of even basic urban services and infrastructure.

It is, therefore, emphasized here that reduction of regional imbalances in urbanisation and strengthening of urban-rural relationships besides augmentation of the economic development forces, will also greatly depend on meaningful and more integrated spatial planning of settlement at the area and regional levels. Deliberate planning for developing nodal points, market systems, and appropriate accessibility networks are urgently called for under the regional or area development strategy plans both in the agriculturally upcoming areas and in also such backward areas where large scale industrial investments are being made.

In general there is the need for a reorientation of thrusts at the urban development both at the national and state levels. Alongwith the flow of more substantial funds for urban development, a set of policies allied to a vigorous strategy for obtaining results is a requisite. Economic and social forces in urban areas are not selfbalancing. Imbalances in industry, transportation, housing, social services and similar elements of urban areas frequently tend to become more pronounced and the public policies often abet it. It must be central to all public policies at the central and state levels to create means to reduce imbalances and seek equilibrium in urban growth. Public policies must avoid sharp imbalances in the ecology of the urban areas and in the location of capital investments such as multipurpose projects involving large scale impounding of water, industrial complexes, tourist complexes etc.

Another important aspect is that many of the public urban development programmes are often based on only "commonsense" knowledge & are not backed by worthwhile scientific research. It is well known that many such plans, under pressure, are prepared in hurry, without adequate even essential data and maps, and by disoriented professionals with fixed and achaic thinking. Some city and regional plans are being prepared within a few days only when a proper plan would take a full team at least a year or more. Help of aerial photographs and satellite imagery are hardly used wherever even available. There is not operating any urban and

regional planning information system and efforts to develop this also has been slow and inadequate. A very special effort is necessary in this direction. The central government must provide more and better information concerning urban affairs, should sponsor extensive and sustained research into urban problems.

In order that the existing urban centres, particularly the small and medium size ones, can function as nodal and catalytic centres of urbanisation, those must be strengthened as urban governments. Many such governments operate fragmentally and function with obsolescent structure and no wonder that they have no fiscal vitality nor management capabilities. Constant reorganisation of the structure and functioning of the local governments in response to the emerging realities and challenges in their cities and in their hinterland is an absolute necessity. Vitality of the local political systems also have been lost overtime in a large number of cases and there is seen a total disappearance of efforts to stand up to face the development problems in the urban areas. It is also seen that a bureaucratic ideology a device by which public officials induce non-public individuals to act in a way the officials desire, is in practice at places. All these trends must be reversed and it must be realised that for a better quality of urbanisation and greater vitality, revamping of the urban government system is called for and also a meaningful revival of the local governments.

As a policy the central policy must seek to equalise the provision of urban infrastructure and services within large cities and urban regions. The central and state government must assert a specific interest in the movement of people, displaced by technology or driven by poverty, from rural to urban areas and also in movement from small urban centres to large cities.

The central government must adequately support and encourage the urban management role of the state governments. Direct central government and city relationship in the case of certain large metro cities may be desirable but no policy at the centre should try to by-pass the state governments in urban affairs.

The Govt. by its own example, and by incentives should seek the development of a far heightened sense of the finite resources of the natural environment and the fundamental importance of aesthetics in successful urban growth. A part of uglification of our urban areas is due to the poor living environment created. We have seen that, exploitation of

natural resources through the present technological means has led to increasingly despoiled, debilitated and now even dangerous urban environments. There are now signs of change of culture, the frontier sense of a natural environment of unlimited resources is giving place to a more acute awareness that serious, perhaps irreparable damages are being done to the environment both urban and rural. The process, somehow, must be reversed. Adoption of non exploitative technology followed by a new structure of economic incentives may be the answer.

At the regional level sustained and extensive research must be sponsored to evolve new and innovative means of urban development in the virgin and newly urbanising areas, to find effective means by which flight of surplus investible funds from poor or backward areas can be curtailed to evolve quick and effective means of transfer of employment from agriculture to non-agricultural sectors in rural areas etc. Urbanisation through a mere process of accretion and based on distress migration should be discouraged by implementing meaningful regional development.

TABLE-A

State/Region	No. of the Distt. under regions	No. of towns 1981	No. of Factories (100 or more emp. /day.)	Factories & per- sons emp- loyed (persons employed per day)	Produc- tion of rice & wheat together average of 1975- 80 (in 000' ton- nes)	No. of Distt. under CAD program- me (as on Dec. 1979)	Total urban pop. (in million) 1981	Level of Urbani- sation	
								1971	1981
	1	2	3	4	5	6	7	8	9
ANDHRA PRADESH	23	260	949	334374	6083.3		12.4	19.3	23.2
(1) Coastal	9	110	580 (61.1)	209246 (62.2)	3392.6 (55.8)	3	5.4 (43.5)	19.3	22.8
(2) Inland Northern	10	102	284 (29.9)	103241 (30.9)	1976 (32.5)	5	5.1 (41.1)	20.9	25.3
(3) Inland Southern	4	48	85 (9.0)	21887 (6.5)	714.7 (11.7)	5	1.9 (15.4)	16.3	19.8
BIHAR	31	219	309	211623	7017.2		8.69	10.0	12.5
(4) Southern	7	101	204 (66.0)	165021 (78.0)	1522.0 (21.7)	1	3.56 (22.9)	16.0	20.3
(5) Northern	13	47	41 (13.3)	22149 (10.5)	2530.8 (36.1)	10	1.71 (41.4)	5.0	6.3
(6) Central	11	71	64 (20.7)	24453 (11.6)	2965.2 (42.3)	8	3.42 (35.7)	11.0	13.6
GUJARAT	19	255	772	407767	1726.3		10.6	28.1	30.3
(7) Plains	14	176	622 (80.6)	361295 (88.6)	1387.4 (80.4)	5	7.7 (72.6)	26.9	29.1
(8) Saurashtra	5	79	150 (19.4)	46472 (11.4)	338.9 (19.6)	1	2.29 (27.4)	31.8	34.1
HARYANA	12	81	255	106372	3938.2		2.74	17.1	22.0
(9) Eastern	7	53	222 (87.1)	92438 (86.9)	2892.0 (73.4)	3	1.9 (67.9)	19.7	25.0
(10) Western	5	28	33 (12.9)	13934 (13.1)	1046.2 (26.6)	2	0.84 (32.1)	13.2	17.6

	1	2	3	4	5	6	7	8	9
KARNATAKA	19	281	1003	339901	2378.5		10.8	24.2	29.2
(11) Coastal	2	40	136 (13.6)	34410 (10.1)	407.1 (17.1)		0.9 (8.3)	18.5	25.7
(12) Inland Eastern	4	46	64 (6.4)	25759 (7.6)	640.6 (26.9)		0.9 (8.3)	17.1	20.5
(13) Inland Southern	5	78	461 (46.0)	171847 (50.6)	593.8 (25.0)	1	4.8 (44.4)	31.6	37.8
(14) Inland Northern	8	117	342 (34.0)	107885 (31.7)	737.0 (31.0)	6	4.2 (39.0)	21.8	25.6
KERALA	12	106	471	399670	1278.6		4.8	15.9	18.9
(15) Northern	5	40	88 (18.7)	22828 (5.7)	625.4 (48.9)	1	1.7 (35.4)	15.0	16.8
(16) Southern	7	66	383 (81.3)	376842 (94.3)	653.2 (51.1)	2	3.1 (64.6)	16.5	20.3
MADHYA PRADESH	45	305	655	282331	5836.4		10.59	16.3	20.3
(17) Eastern	8	63	160 (24.4)	82450 (29.2)	2402.4 (41.2)	1	2.16 (31.3)	10.1	14.2
(18) Inland Eastern	8	50	89 (13.6)	30301 (10.7)	835.8 (14.3)		1.77 (18.1)	15.0	19.1
(19) Inland Western	10	61	70 (10.7)	28165 (10.0)	1041.8 (17.9)	4	2.19 (16.1)	19.9	24.6
(20) Western	11	85	291 (44.4)	120965 (42.8)	820.6 (14.1)	1	2.97 (20.9)	23.0	25.5
(21) Northern	8	46	45 (6.9)	20450 (7.2)	735.8 (12.6)	2	1.50 (13.7)	16.7	20.9
MAHARASHTRA	26	307	1491	796307	3144.6		21.9	31.3	35.0
(22) Coastal	4	64	923 (62.0)	545711 (68.5)	731.7 (23.3)		10.1 (45.9)	61.7	66.4
(23) Inland Western	6	74	298 (20.0)	146521 (18.4)	640.1 (20.4)	5	4.4 (20.0)	24.8	27.7
(24) Inland Northern	3	41	69 (4.6)	34253 (4.3)	291.9 (9.3)	1	1.9 (9.1)	24.2	25.0
(25) Inland Central	5	53	66 (4.4)	18699 (2.3)	396.6 (12.6)	4	1.8 (8.2)	14.8	18.6
(26) Inland	6	60	124 (8.3)	45014 (5.7)	362.8 (11.5)		3.2 (14.5)	26.6	30.8
(27) Eastern	2	15	11 (0.7)	6109 (0.8)	721.5 (22.9)	2	0.5 (2.3)	12.1	12.8
ORISSA	13	105	88	39522	4708.4		3.1	8.4	11.8
(28) Coastal	4	44	37 (42.0)	14858 (37.6)	2402.0 (51.0)	3	1.47 (47.3)	8.7	11.8
(29) Southern	3	19	9 (10.2)	4922 (12.5)	685.8 (14.6)		0.40 (17.8)	6.4	8.8
(30) Northern	6	42	42 (47.7)	19742 (50.0)	1620.6 (34.4)	3	1.23 (34.9)	9.0	13.2
PUNJAB	12	134	228	97861	8713.6		4.6	23.7	27.5
(31) Northern	7	75	178 (78.1)	61039 (62.4)	4176.4 (47.9)		2.9 (63.0)	25.3	29.9
(32) Southern	5	59	50 (21.9)	36822 (37.6)	4537.2 (52.1)		1.7 (37.0)	21.4	24.3

	1	2	3	4	5	6	7	8	9
RAJASTHAN	26	160	152	97666	2735.2		7.2	17.6	20.9
(33) Western	9	36	30 (19.7)	12050 (12.3)	248.8 (9.1)	1	2.2 (29.3)	19.7	21.8
(34) N. Eastern	9	78	77 (50.7)	42225 (43.2)	1634.8 (59.8)	1	3.6 (43.9)	18.9	23.0
(35) Southern	4	16	16 (10.5)	25287 (25.9)	306.2 (11.2)		0.8 (14.5)	10.6	12.3
(36) S. Eastern	4	30	29 (19.1)	18104 (18.5)	545.4 (19.9)	2	0.6 (12.3)	15.7	20.3
TAMIL NADU	16	434	1330	511776	5785.0		15.9	34.4	32.3
(37) Coastal Southern	4	118	367 (27.6)	157400 (30.8)	2308.8 (39.9)		3.2 (20.1)	21.8	23.7
(38) Coastal Northern	5	112	333 (25.0)	130828 (25.6)	2293.6 (39.6)	2*	6.3 (39.6)	37.8	40.9
(39) Inland	7	204	630 (47.4)	223548 (43.7)	1182.6 (20.4)	2*	6.4 (40.3)	30.9	33.2
UTTAR PRADESH	56	646	720	344323	13974.0		19.97	14.0	18.0
(40) Himalayan	8	37	34 (4.7)	15024 (4.4)	783.8 (5.6)		0.89 (4.3)	14.7	18.4
(41) Western	19	318	406 (56.4)	143886 (41.8)	5896.3 (42.2)	8	9.36 (33.0)	18.3	22.8
(42) Central	9	103	142 (19.7)	103905 (30.2)	2241.5 (16.0)	6	4.21 (17.0)	17.4	21.4
(43) Eastern	15	158	129 (17.9)	72769 (21.1)	4470.3 (32.0)	11	4.43 (40.9)	8.2	10.7
(44) Southern	5	30	9 (1.3)	8739 (2.5)	582.1 (4.2)		1.08 (4.8)	14.7	19.9
WEST BENGAL	16	287	944	710552	6780.1		14.41	24.7	26.4
(45) Himalayan	3	26	116 (12.3)	18745 (2.6)	582.2 (8.6)		0.71 (4.9)	10.3	14.0
(46) Plain Eastern	5	44	36 (3.8)	9035 (1.3)	2203.7 (32.5)	2	1.5 (10.4)	9.6	11.4
(47) Plain Central	5	185	756 (80.1)	663523 (93.4)	2080.6 (30.7)	3	11.3 (78.5)	42.3	41.2
(48) Plain Western	3	32	36 (3.8)	19249 (2.7)	1913.6 (28.2)×	2	0.9 (6.2)	7.7	8.3
Total									

- (1) × For Baidyabati district of W. Bengal average production of rice for 1970-73 has been taken into account.
- (2) *Where CAD authority was to be established in 1979.
- (3) Figure in brackets is the percentage of the state total.
- (4) Data on factories and persons employed has been taken from the All India Directory of Industrial Establishments, Labour Bureau, Min. of Labour & Rehabilitation; Govt. of India, Shimla/Chandigarh; Vol. I to VI; 1978.
- (5) No of districts under CAD programme has been taken from Water Management Division, Min. of Agriculture and Irrigation; Govt. of India, New Delhi., as on Dec. 1979.
- (6) Data on Level of Urbanisation has been taken from the Task Forces on Housing and Urban Development Vol. I, New-Delhi—1983.

TABLE B

No. of towns and cities/UAs., factories and share of urban population by the districts having 1 percent or more share of the National Production of Rice or Wheat

State	Total No. of Distt. 1971 Census	No. of Distt. having share of rice and wheat 1% or more (average of 1975-80)	No. of Towns or Distt. (with 1% or more share of rice & wheat) 1981	Total No. of towns in the state 1981	No. of cities and UA (in the Distt. having 1% or more share of rice or wheat) 1981	Total No. of cities in the state 1981	No. of factories (for Distt. having 1% or more share of rice & wheat) with 100 or more employment/day 1978-79	Total No. of factories in the state (with 100 or more employment per day 1978-79)	% share of urban population of the state urban (by Distt. having 1% or more rice & wheat) 1981	No. of Distt. having growth rate more than the state urban growth rate (by the Distt. having 1% or more than of rice or wheat) 1981
	1	2	3	4	5	6	7	8	9	10
Andhra Pradesh .	21(23)	5	70 27.8%	252	9 45.0%	20	324 34.1%	949	29%	2
Bihar . . .	17(31)	3	36 16.4%	220	2 12.5%	16	33 10.7%	309	12.1%	2
Haryana . . .	10(12)	3	23 28.4%	81	3 27.3%	11	25 9.8%	255	29%	—
Madhya Pradesh .	45	2	23 7.0%	327	2 14.3%	14	74 11.3%	655	8.9%	2
Orissa . . .	13	3	25 23.1%	108	2 33.3%	6	45 51.1%	88	32.7%	3
Punjab . . .	12	9	107 80.0%	134	7 100%	7	196 86.0%	228	82.6%	4
Rajasthan . . .	26	1	16 8.0%	201	1 9.1%	11	13 8.6%	152	5.8%	1
Tamil Nadu . . .	13	4	149 34.3%	434	5 25%	20	288 21.7%	1330	25.2%	3
Uttar Pradesh . . .	54(56)	5	115 16.3%	704	9 30%	30	137 19.1%	720	19.1%	4
West Bengal . . .	15	5	154 52.9%	291	7 63.6%	11	549 58.2%	944	45.2%	4

1. Figure in brackets are the number of districts according to 1981 census.

2. The table comprises only those states which have districts with 1% or more share of the national production of Rice & Wheat.

TABLE—C

Urban growth characteristics of the districts which contribute more than 1 % share in the national production of wheat or Rice.

State	Districts	Urban population in 000'		% share of urban pop. by the dist. of the total urban pop., of the state		% change of urban towns in the Dist.		No. of cities in the Dist.	No. of factories in the Dist. (with 100 or more employ-ment/day) 1978-79	Crop & % share by the Dist.					
		1971	1981	1971	1981	5	6			7	8	9	10	11	12
ANDHRA															
	E. Godavari	594	822	7.1	6.6	+38.4	17	2	35	Rice	1.2				
	W. Godavari	420	597	5.0	4.8	+42.1	11	2	32	Rice	1.91				
	Krishna	680	992	8.1	7.9	+45.9	17	2	41	Rice	1.27				
	Guntur	711	946	8.5	7.6	+33.1	15	2	208	Rice	1.05				
	Nalgonda	122	260	1.5	2.1	+113.1	10	1	8	Rice	1.03				
BIHAR															
	Shahabad	324	488	5.8	5.6	+50.6	14	1	17	Rice	1.19	Wheat	1.2		
	Santhal Pargana	184	256	3.3	2.9	+39.1	12	0	7	Rice	1.02				
	Saran	180	316	3.2	3.6	+75.6	10	1	9	Wheat	1.08	Rice	0.37		
HARYANA															
	Kurukshetra	—	186	—	6.6	—	5	—	—	Wheat	1.69	Rice	0.83		
	Karnal	337	346	19.0	12.2	—	15	2	13	Wheat	1.49	Rice	0.58		
	Hissar	340	289	19.2	10.2	—	8	1	12	Wheat	1.03				
MADHYA PRADESH															
	Raipur	325	529	4.8	5.0	+62.8	10	1	46	Rice	1.32				
	Bilaspur	264	409	3.9	3.9	+54.9	13	1	28	Rice	1.06				
ORISSA															
	Balasore	100	186	5.4	6.0	+86.0	6	0	3	Rice	2.23				
	Cuttack	306	476	16.6	15.3	+55.6	9	1	22	Rice	1.29				
	Sambalpur	222	353	12.0	11.4	+59.0	10	1	20	Rice	1.08				
PUNJAB															
	Jullundur	437	613	13.6	13.2	+40.3	16	1	31	Wheat	1.66	Rice	0.38		
	Ludhiana	494	764	15.4	16.4	+54.7	10	1	72	Wheat	2.61	Rice	0.33		
	Ferozepur	378	298	11.8	—	—	9	0	9	Wheat	2.4	Rice	0.72		
	Amritsar	536	722	16.7	15.5	+34.7	11	1	35	Wheat	2.2	Rice	0.75		
	Gurdaspur	249	328	7.7	7.1	+31.7	11	2	8	Wheat	1.23	Rice	0.55		
	Bhatinda	264	296	8.2	6.4	+12.1	12	1	4	Wheat	1.62				
	Patiala	316	464	9.8	10.0	+46.8	13	1	23	Wheat	2.26	Rice	0.76		
	Sangrur	233	322	7.2	6.9	+38.2	14	0	5	Wheat	2.6	Rice	0.36		
	Fardkot	—	344	—	7.4	—	11	0	9	Wheat	2.34	Rice	0.32		

	1	2	3	4	5	6	7	8	9	10	11	12
RAJASTHAN												
Sri Ganganagar	230	418	5.1	5.8	+81.7	16	1	13	Wheat	1.38	—	—
TAMILNADU												
Chingleput	1011	1408	8.1	8.8	+39.3	66	1	182	Rice	1.69	—	—
S. Arcot	513	660	4.1	4.1	+28.7	17	1	22	Rice	1.81	—	—
N. Arcot	783	1016	6.3	6.4	+29.8	34	1	32	Rice	1.44	—	—
Thanjavur	788	937	6.3	5.9	+18.9	32	2	52	Rice	2.71	—	—
UTTAR PRADESH												
Meerut +												
Ghaziabad	817	1493	6.6	7.5	+82.7	26	3	55	Wheat	1.81	—	—
Bulandshahr	276	456	2.2	2.3	+65.2	22	1	9	Wheat	1.28	—	—
Aligarh	377	592	3.0	3.0	+57.0	20	1	16	Wheat	1.28	—	—
Moradabad	577	849	4.7	4.3	+47.1	21	3	38	Wheat	1.04	—	—
Gorakhpur	240	402	1.9	2.0	+67.5	11	1	19	Wheat	0.99	Rice	0.50
WEST BENGAL												
24 Pargana	2970	4170	27.1	28.9	+40.4	74	1	462	Rice	1.58	—	—
Burdwan	892	1421	8.1	9.8	+59.3	49	5	58	Rice	1.63	—	—
Birbhum	125	174	1.1	1.2	+39.2	7	0	5	Rice	1.08	Wheat	0.38
Bankura	152	181	1.4	1.3	+19.1	5	0	5	Rice	1.24	—	—
Midnapore	420	573	3.8	4.0	+36.4	19	1	19	Rice	2.12	—	—



सत्यमेव जयते

URBAN DEVELOPMENT AND FIVE YEAR PLANS



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सत्यमेव जयते

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सत्यमेव जयते

Urban Development and the Five Year Plans

Vinod K. Tewari*

I. INTRODUCTION

I.1 The broad objective of India's planning efforts has been to increase the pace of economic development linked with continuous progress towards equality and social justice. The five year plans, the primary instruments through which planning efforts are made, spell out policy guidelines and outline the development activities and pattern of plan investments of the government with regard to different sectors of the economy.

I.2 Although the need for a planned development of urban areas for achieving balanced economic development was recognised in the very first plan launched in 1951, some significant efforts in this direction were initiated only from the fifth plan onwards. An earlier review of urban development policies and programmes by a Task Force set up by the Planning Commission has stated that 'policy and programme intervention has been half-hearted, loosely coordinated, to say the least and even counter-productive. Policy has been half-hearted in as much as few of the points at which government might intervene to manage urbanization and affect its course and direction have been properly tackled. It is un-coordinated in as much as national planning tends to be in terms of sectoral outlays while urban planning has been mainly linked with physical layouts. It is counter productive in as much as the effort has been to divert, retard, or stop urban growth, and in particular to inhibit the expansion of metropolitan cities'.

I.3 Urbanization, the process related to concentration of people engaged in non-agricultural occupations and concentration of non-agricultural end uses in a

specialized area, is strongly related to economic development. Urban India is highly imbalanced both in terms of urban-industrial concentration and urban infrastructure. The apex of the Indian urban system which is metropolitan is fragmented, while the urban base in the rural areas is sub-standard, and the intermediate link, through market towns, is weak.

I.4 This report presents in Section II, the genesis of India's urban policies as spelled out in the five year plans. Section III provides an analysis of plan outlays and expenditure pattern for the development of urban areas. A discussion on the development programmes initiated in various plans is presented in Section IV. And finally, an examination of the urban development programmes *vis-a-vis* the urban policy statements, and some directions for an integrated urban policy are presented in the last section of this paper.

II. URBAN DEVELOPMENT POLICIES

II.1 *First Five Year Plan (1951/52—1955/56)*

II.1.1 In the First Five Year Plan, the problem of urbanisation was equated largely with the problem of housing shortage in urban areas. However, the need for a planned development of urban areas was felt and it was emphasised that there should be a National Town and Country Planning Act which would facilitate planning of urban land use, control of urban development, location of industries in the areas considered suitable, clearance of slums, carrying out of civic and diagnostic surveys, and preparation of Master Plans. Also, the necessity of regional plans, keeping in view the implementation of several river valley projects, was emphasised for an integrated development of rural and urban areas.

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II.2 *Second Five Year Plan (1956/57—1960/61)*

II.2.1 Though the shortage of houses in urban areas was considered to be a major problem in the Second Five Year Plan also, it was felt that the housing problem should not be viewed in isolation, but as part of the wider problem of planning for urban areas and their economic and other relationships with their respective regions. In this context, the following were envisaged : (i) a phased programme for survey and preparation of master plans for all important cities, like Bombay, Calcutta, Delhi and Madras; (ii) preparation of regional plans for new towns like Sindri, Durgapur, Bhilai and Neivelli; (iii) preparation of regional plans for the areas to be served by the river valley projects, like Damodar, Bhakra Nangal, Hirakud, Tungabhadra and Koyna; (iv) legislation of a Town and Country Planning Act in all states, and setting up of machinery to implement it; and (v) expansion of existing facilities for training town planners and architects.

II.2.2 The Second Five Year Plan also envisaged an integrated implementation of all development programmes, like the location of large industries and other undertakings, development of village and small industries, location of industrial estates and townships, major irrigation and power projects, establishment of warehouses and marketing centres for agricultural products, housing schemes, schemes of urban water supply and sanitation, and transport facilities having bearing upon urban development and re-development.

II.3 *Third Five Year Plan*

II.3.1 In the Third Five Year Plan, the pattern of economic development and the general approach to industrial locations were considered to be the most decisive factors in the process of urbanisation. It was stressed that the broad objectives must be to secure a balanced development between large-scale, medium-scale and small-scale industries on the one hand, and between rural and urban areas on the other. It was, therefore, suggested that (i) new industries should be established as far as possible away from the large and congested cities; (ii) while planning for large industries the concept of region should be adopted; (iii) the economic interdependence between towns and their surrounding rural hinterland in the Community Development Project Areas and other areas should be strengthened through blending the rural and urban components of development into a composite plan; and (iv) efforts should be made in each rural area to diversify the occupational pattern.

II.3.2 The deteriorating living conditions in the rapidly growing urban areas were attributed to the high costs of urban development, particularly the cost

of housing, water supply, drainage, transport and other services, apart from the existence of unemployment, overcrowding and the growth of slums. In order to overcome this situation, the following were suggested:

(i) control of urban land values; (ii) preparation of master plans for cities, towns and industrial centres; (iii) regional plans for resource regions (i.e., river valley project areas); (iv) improving housing standards; and (v) strengthening of municipal administrations. The steps suggested for controlling the prices of urban land were : (i) the freezing of land prices through notifications; (ii) acquisition and development of land by public authorities, (iii) allotment of land on lease-hold basis; (iv) betterment levies and taxation on agricultural land put to non-agricultural use; (v) capital tax on transfer of freehold lands; (vi) taxation on vacant plots in developed areas with power to acquire if they are not built upon within a specified period. (vii) setting a ceiling on the size of individual plots and limiting the number of plots a single party can acquire; and (viii) determining appropriate norms of rent, and regulation and control over rents.

II.3.3 For the preparation of master plans, the first step suggested was the preparation of interim general plans establishing the broad pattern of land use to which development should conform. This was to be followed by the preparation of detailed master plans for urban and regional development. A tentative list of cities, towns, industrial centres, and resource regions for which master plans were to be prepared was also given in the Plan (Table 1). It was observed that the primary responsibility for the preparation of master plans was that of the state governments and the concerned local administrations. Once again, the legislation of Town and Country Planning Act and the establishment of town planning organisations, with adequate trained personnel, by the state governments were emphasised.

II.3.4 For the solution of housing and related problems, that of slums, the adoption of fiscal measures including local taxation for discouraging luxury housing advice on building designs, modification in existing building by-laws of local bodies, pre-fabrication of building components, and greater use of locally available comparatively cheap building materials were suggested.

TABLE 1

A tentative List of Cities, Towns, Industrial Centres and Resource Regions for which Development Plans were to be Prepared in the Third Five Year Plan.

Type	City/Town/Region
Metropolitan Cities, State Capitals & Port Towns :	1. Ahmedabad, 2. Bangalore, 3. Bhopal, 4. Cochin, 5. Delhi (Metropolitan Region), 6. Greater Bombay, 7. Greater Calcutta, 8. Hyderabad-Secunderabad, 9. Jaipur, 10. Kandha, 11. Kanpur, 12. Lucknow, 13. Madras, 14. Patna, 15. Poona, 16. Shillong, 17. Srinagar, 18. Trivandrum, 19. Varanasi, and 20. Visakhapatnam.
Industrial Centres :	1. Allahabad, 2. Asansol, 3. Baranni, 4. Bhadravati, 5. Bhilai, 6. Bokaro, 7. Chittaranjan, 8. Coimbatore, 9. Dohri-on-Sone, 10. Dhanbad, 11. Digboi, 12. Durgapur, 13. Gorakhpur-Deoria, 14. Guntur, 15. Jamshedpur, 16. Katagudam, 17. Mirzapur, 18. Moghul Sarai, 19. Nangal, 20. Pankaj, 21. Ranchi, 22. Risikesh-Hardwar, 23. Roorkeela, 24. Sindri, 25. Tinsukhia, 26. Vijayawada, 27. Warrangal.
Resource Regions :	1. Bhakra-Nangal Area, 2. Damodar Valley, 3. Dandakaranya, 4. Rajasthan Canal Area, and 5. Rihand Area.

II.3.5 In order to strengthen the municipal administrations, it was suggested that their resources and personnel should be increased, and their jurisdictions and functions enlarged to enable them to carry out the task of providing services needed for development in urban areas, expanding housing, and improving living conditions.

II.4 Fourth Five Year Plan (1969/70—1973/74)

II.4.1 In the Fourth Five Year Plan, the necessity of not only preventing the further growth of urban population but also that of decongestion and dispersal measures in the cities like Bombay and Calcutta were highlighted. As for other cities, it was stressed that the future planning must be oriented towards stabilisation of population at a desirable optimum level and suitable new urban centres should be planned for the spill-over population, and the potentialities of developing existing small towns should be explored fully. The problem of urbanisation was thus linked with the problem of planning spatial locations of economic activities. A beginning in this direc-

tion was suggested to be made by tackling the problems of larger cities, and taking positive steps for dispersal of economic activities and population by creating new urban centres. Further, it was suggested that the legal provisions for the implementation of regional plans by the local authorities should be made, and the administrative structure of local bodies should be reviewed and rationalised. Also, long-term plans should be formulated for avoiding wastage of funds on specific schemes; and the development plans of cities and towns, in the longrun, should be self-financing. The evolution of a radical policy on urban land was considered to be an immediate requirement for the future development of cities.

II.4.2 The establishment of the Housing and Urban Development Corporation (HUDCO) was expected to supplement the resource-allocations made for urban development. The resources allocated were to be further supplemented by local resources augmented through measures like improvement in assessment and collection of taxes, new or enhanced taxes, and borrowing programmes of local authorities. In this context, it was suggested that the state governments should take follow-up action on the recommendations of the committees on *Rural-Urban Relationship*, *Augmentation of Financial Resources of Urban Local Bodies*, and *Urban Land Policy*.

II.4.3 Further, it was suggested that the scope and effectiveness of plan outlay for urban development could be enhanced by integrating it with the provisions in other sectors, and complementary efforts in the private and cooperative sectors. Also, the State Governments were advised to review such statutes as might be indirectly but unduly hindering the development of private land and property for more intensive and economic use.

II.5 Fifth Five Year Plan (1974/75—1978/79)

II.5.1 The objectives of the Fifth Five Year Plan with regard to urban and regional development were : (i) to augment the civic services to the extent possible; (ii) to make efforts to tackle the problems of metropolitan cities on a more comprehensive and regional basis; (iii) to promote the development of small towns and new urban centres; (iv) to assist in the implementation of projects of national importance and (v) to provide support for the enlargement of the scope and functions the industrial townships set up by the central government undertakings. Recognising the serious problems posed by the continuous and excessive rise in the value of urban land for urban planning and development, it was stressed that the objective of urban land policy should be (i) to promote the optimum use of land; (ii) to make

land available for purposes consistent with economic growth and social policy; (iii) to reduce/prevent concentration of land ownership, rising land values and speculation, etc; and (iv) to allow land to be used as a resource for financing urban development.

II.5.2 To achieve these objectives, the following tools and policy instruments were suggested : (i) legal and regulatory measures, like controlling use of land, restriction on plot-sizes and transfer of land, conversion of free-hold tenures into lease-hold tenures by special legislation, and pre-emptive acquisition; (ii) fiscal measures, like differential taxation on urban land depending on the nature of its use, taxes for mopping up unearned increments in the value of land and property, enhanced surcharge/stamp duty on the transfer of urban land and property, conversion tax on the change of land use, and betterment levy on private land; and (iii) developmental measures, like large-scale acquisition and development of land.

II.6 *Sixth Five Year Plan (1980/81—1984/85)*

II.6.1 Keeping in view the inter-regional and intra-regional variations in the urbanisation process, it was observed in the Sixth Five Year Plan, that the national urbanisation policy should involve specific consideration of regional problems, and urban development should be viewed in the context of its relationship with rural development in each region. As such, the problem of each urban area should be seen in the light of its specific functions within the overall human settlement framework. Further it was suggested that the thrust in urban policy, during the next decade, should be on the provision of adequate infrastructural and other facilities in the small, medium and intermediate towns which have been neglected so far.

The aim should be to strengthen these market centres so that they could serve as growth and service centres for their rural hinter-lands. Further, the necessity of positive inducements for setting up new industries, and other commercial and professional establishments in small, medium and intermediate cities in order to maintain the present balanced distribution or urban population was stressed.

II.6.2 As for the large cities, it was suggested that the care must be taken to improve the conditions of urban poor and raise the level of civic services so that the large capital investments that existed in these cities could be utilised better.

II.7 *Seventh Five Year Plan (1985/86—1989/90)*

II.7.1 In the Seventh Five Year Plan, it was suggested that the major constituents of a comprehensive plan for urban development should be : (i) planned and integrated growth of small and medium towns

and cities with slowing down of the growth of big metropolises; (ii) revitalisation of civic bodies; (iii) reform of the municipal tax system and municipal administration; (iv) improvement of slums and the provision of basic services; (v) schemes for regular devolution of funds from State Governments; and (vi) establishment of the institutional framework for channeling capital for the improvement of urban infrastructure.

II.7.2 It was further observed that the planning for urban development should, essentially, be supportive of the economic development in the country, state and sub-regions and a proper urban development approach must have two constituents : (i) interaction between physical planning and investments, and (ii) preparation of regional and sub-regional urban development plans. The identification of regional urban systems, it was suggested, should be on the basis of regional characteristics and the relative needs and functions of each town in its regional context. Also, it was stressed that the industrial location policy must be made subservient to regional and urban planning.

II.7.3 It was felt that the procedure being followed for planning of metropolitan areas should be re-examined, and a suitable new approach and methods should be evolved. Accordingly, it was suggested that planning for metropolitan development should provide for (i) coordination of city level plans with central and state level planning and resource allocation exercises; (ii) coordination of city level investment plans with resource availability and physical planning; and (iii) a close relationship between the norms and standards applied in physical planning and the socio-economic realities prevailing in the cities.

II.7.4 In the case of small and new urban centres, it was suggested that the strategies should be (i) to purchase land in concentric circles at the short notice, (ii) quickly to provide infrastructural facilities on these lands, and (iii) to sell these developed lands to public and private sector purchasers in order to earn profit from site-development. Also, efforts should be made to channelise the private and public sector investment in industries to the vicinity of small and medium towns.

II.7.5 The needs of 'minority' concentration and their development in the context of their socio-economic milieu was also suggested to be taken into account while making provision for urban development. Further, it was suggested that the strategy for urban development should include a package of measures to strengthen the capability of local bodies through restoring popular governments, structural reforms, improvement in general and financial administration, and

reform of the tax system. Also, the central government should extend aid to a select number of institutions for promoting research in the area of urban administration, urban finances, planning for the development of urban infrastructure, etc., and to strengthen their capability for providing technical assistance in these areas to state level institutions and local bodies.

III. PLAN OUTLAY AND EXPENDITURE

III.1 The plan outlay for the development of urban areas increased from Rs. 64.78. crores in the First Five Year Plan to Rs. 6651.20 crores in the Seventh Five Year Plan, amounting to an increase of about 102 times. However, this increase in the outlay was not so much due to the realisation of the importance of planned development of urban areas, but mainly because of the substantial increase in the total plan outlay itself. The total plan outlay increased from Rs. 2356 crores in the First Plan to Rs. 180,000 crores in the Seventh Plan, an increase of over 74 times. The relative share of the outlay for the development of urban areas in the total plan outlay over

seven plans ranged between 2.7 per cent to 4.3 per cent (Table-2). The plan outlay for the development of urban areas can, broadly, be grouped into :

- (i) Urban Development (Planning and Infrastructure),
- (ii) Urban Housing, and
- (iii) Urban Water Supply and Sanitation

III.2 Urban Development

III.2.1 Though the necessity of planned urban development was recognised in the First Five Year Plan itself and was repeatedly emphasised in subsequent plans, no concrete programme for the planned development of urban areas was evolved and implemented in the first two plans. The outlay for development of urban areas in these two plans was only for urban housing and urban water-supply and sanitation. Though no provision had been made for urban development in the Second Five Year Plan, an expenditure of Rs. 1.1 crores was incurred in this Plan on town planning, etc.

TABLE 2
Outlay (Rs. in Crore) for urban Development in Five Year Plans

Plan	Urban Development	Urban Housing	Urban Water Supply & Sanitation	Total Outlay for Urban Development	Total Plan Outlay	% of outlay for Urban Development to Total Plan Outlay
First Plan (1951/56)	0.00	48.61 (75.0)	16.17 (25.0)	64.78 (100.0)	2356.00	2.7
Second Plan (1956/61)	0.00	78.49 (57.5)	58.00 (42.5)	136.49 (100.0)	4800.00	2.8
Third Plan (1961/66)	17.70 (6.4)	169.42 (61.4)	89.00 (32.2)	276.12 (100.0)	8573.00	3.2
Three Annual Plans (1966/69)	17.76 (15.0)	78.85 (66.9)	21.31* (18.1)	117.92 (100.0)	6576.50	1.8
Fourth Plan (1969/74)	70.80 (13.7)	170.23 (32.9)	276.00 (53.4)	517.03 (100.0)	15902.20	3.3
Fifth Plan (1974/79)	505.46 (31.9)	540.92 (34.1)	539.17 (34.0)	1585.55 (100.0)	37250.00	4.3
Sixth Plan (1980/85)	997.53 (25.7)	1127.37 (29.1)	1753.56 (45.2)	3878.46 (100.0)	97500.00	4.0
Seventh Plan	1801.29	1879.31	2971.25	6651.85	180000.00	3.7

*This figure does not include outlays for urban water supply and sanitation for the years 1967/68 and 1968/69 as the separate outlay for the same had not been indicated in the concerned Annual Plan Documents.

Source : Five Year Plan Documents and Annual Plan Documents.

III.2.2 In the first two plans, the concern for the planned development of urban areas remained confined to stating the problems of urbanisation and the desired approach for the planned development of urban areas. It was only in the Third Plan that an outlay of Rs. 17.70 crores (6.4 per cent of the total outlay for the development of urban areas) was made under this sub-sector. Of Rs. 17.70 crores, 30.5 per

cent was for town planning etc. and remaining 69.5 per cent for the development of urban infrastructure, etc. In the first three years of the Third Plan, the expenditure incurred on town planning etc. was only Rs. 41.52 crores (28 per cent of the allocation), and on infrastructure it was Rs. 6.40 crores, i.e. 51 per cent of the allocation. The overall expenditure was about 44.0 per cent of the outlay. The outlay for

urban development in the three annual plans (1966/69) was Rs. 17.76 crores. This was mainly for survey and preparation of master plans.

III.2.3 The outlay in the Fourth Plan was substantially enhanced to Rs. 70.80 crores, of which Rs. 70.00 crores was in the States and union territories (S&UT) sector, and Rs. 80 lakhs in the central sector. However, this outlay was only 13.5 per cent of the total outlay for the planned development of urban areas in the Fourth Plan. The expenditure during this Plan period was Rs. 76.00 crores against an outlay of Rs. 70.00 crores in the S&UT sector, and Rs. 76.00 lakhs against the outlay of Rs. 80.00 lakhs in the central sector.

III.2.4 In addition to these expenditure incurred within the plan provision, the expenditure on urban development incurred outside the plan provision during the Fourth Plan period was quite substantial. Under the scheme of environmental improvement of slum areas, which was introduced in the central sector in the year 1972/73, the expenditure incurred during the last two years of the Fourth Plan was estimated to be Rs. 30 crores. Similarly, the plan outlay of Rs. 43 crores for the integrated development of the Calcutta Metropolitan Area (CMA) was substantially augmented with non-plan funds made available by Government of India, Government of West Bengal, and the World Bank. The total expenditure on the integrated development of the CMA during the Fourth Plan period was expected to be Rs. 150 crores, including the provision of Rs. 43 crores made in the Fourth Plan. Further, with an additional provision of Rs. 35.00 crores under the heading 'Miscellaneous' in the state sector in the Fourth Plan, projects on the development of four state capital viz., Bhopal, Bhubaneswar, Chandigarh and Gandhinagar, were implemented. The expenditure incurred on these projects during the first three years of the Fourth Plan was about Rs. 26.40 crores. Thus, the expenditure incurred on urban development outside the provision of the Fourth Plan was much larger than that within its provisions.

III.2.5 The provision for urban development was enhanced substantially in the Fifth Five Year Plan. The outlay of Rs. 505.46 crores was about seven times the outlay in the Fourth Plan. Out of Rs. 505.46 crores, Rs. 350.65 crores (69.4 per cent) was in the S&UT sector and Rs. 154.81 crores (30.6 per cent) in the central sector.

III.2.6 The outlay in the Sixth Five Year Plan was enhanced to Rs. 997.53 crores against Rs. 505.46 crores in the Fifth Plan. This enhancement in outlay amounted to an increase of 97.4 per cent. Out of Rs. 997.53 crores, 89.0 per cent was in the S&UT

sector and the remaining 11.0 per cent in the central sector. The expenditure incurred on this account in the first year of Sixth Plan was Rs. 484.74 crores in the S&UT sector and Rs. 43.51 crores in the central sector. Thus, in the first three years, while 54.6 per cent of the outlay in the S&UT sector was spent, the expenditure in the central sector only 39.6 per cent of the outlay.

III.2.7 The outlay for urban development was enhanced from Rs. 997.53 crores in the Sixth Plan to Rs. 1801.29 crores in the Seventh Five Year Plan, i.e., an increase of 80.6 per cent. Out of the outlay of Rs. 1801.29 crores, Rs. 1633.58 crores (90.7 per cent) was in the S&UT sector and Rs. 168.01 crores (9.3 per cent) in the central sector.

III.3 Urban Housing

III.3.1 The urban housing programme has been the most important among the three components, viz., urban development, urban housing, and urban water supply and sanitation, of the urban development sector. In the First Five Year Plan, the problem of urbanisation was viewed largely in terms of the shortage of houses in urban areas, and the outlay on urban housing, being Rs. 48.61 crores, accounted for 75 per cent of the total outlay in the urban development sector. Out of Rs. 48.61 crores, Rs. 38.50 crores (79 per cent) had been provided in the central sector for giving subsidies and loans for urban housing including slum clearance, and Rs. 10.11 crores (21 per cent) in the S&UT sector for state housing schemes. The utilisation of the provision was rather slow in the beginning as no housing programme had been evolved at the time of launching the First Five Year Plan. It was only in September, 1952 that the first housing scheme, viz., subsidised housing for industrial workers was introduced. The second scheme, the low income group housing scheme, was introduced in November 1954.

III.3.2 Though an amount of Rs. 20.50 crores had been sanctioned under the scheme of subsidised housing for industrial workers by September 1955, only Rs. 2.8 crores had been disbursed as subsidy and Rs. 6.2 crores as loan under this scheme. An amount of Rs. 4.10 crores had been disbursed as loans under the low income group housing scheme by September 1955. The expenditure against the outlay of Rs. 10.11 crores in the S&UT sector was Rs. 6.2 crores by the end of 1954/55.

III.3.3 An outlay of Rs. 108 crores had been made for urban housing in the Second Five Year Plan. Later on, the outlay was revised and reduced to Rs. 78.49 crores, which was 61 per cent higher than

the outlay for urban housing in the First Plan. The anticipated expenditure against the outlay during the Second Plan period was Rs. 75.4 crores. Out of the expenditure of Rs. 75.4 crores, the subsidised industrial housing scheme accounted for 32 per cent, the low income group housing scheme for 50 per cent, the slum clearance scheme for 13 per cent, and the scheme of land acquisition and development for 3 per cent. The remaining 2 per cent of the expenditure was on the middle income group housing scheme, and state housing schemes which were introduced in the year 1958-59.

III.3.4 In the Third Five Year Plan, an outlay of Rs. 169.42 crores had been made for urban housing which was 116 per cent higher than the outlay in the Second Plan. About 35 per cent of the total outlay was to be provided by the Life Insurance Corporation (LIC) of India. The total expenditure during the Third Plan period, being Rs. 171.73 crores, was marginally higher than the original outlay. Out of the total expenditure of Rs. 171.73 crores, the scheme of subsidised housing for industrial workers accounted for 13 per cent, the low income group housing scheme for 21 per cent, the scheme of slum clearance for 16 per cent, the scheme of land acquisition and development for 14 per cent, and the middle income group housing scheme for 13 per cent. The scheme of office and residential accommodation for central government employees, for which no provision had originally been made in the plan, accounted for 17 per cent of the expenditure on urban housing. The remaining expenditure was accounted for by the dock labour housing scheme and the expenditure on experimental housing and

III.3.5 During the three annual plan periods (1966-69), the plan outlay for urban housing was Rs. 78.85 crores. Against this outlay, the expenditure incurred was Rs. 83.26 crores. Of this total expenditure, 43 per cent had been provided by the LIC.

III.3.6 The outlay for urban housing in the Fourth Five Year Plan period was Rs. 170.23 crores. Of the total outlay, 73 per cent was in the S&UT sector and the remaining 27 per cent in the central sector. The total expenditure incurred on this account during the Fourth Plan period was about Rs. 169.13 crores, of which 79 per cent was in the S&UT sector and 21 per cent in the central sector. Of the total expenditure in the S&UT sector, the scheme of subsidised housing for industrial workers accounted for 16 per cent, the slum clearance and improvement scheme for 19 per cent, the low income group housing scheme for 27 per cent, the middle income group housing scheme for 15 per cent, the scheme of land acquisition and development for 7 per cent, and the rental housing

scheme for 10 per cent, the remaining 6 per cent was accounted for by other schemes. Of the total expenditure of Rs. 34.93 crores in the central sector, 72 per cent was accounted for by the scheme of office and residential accommodation for central government employees, 17 per cent by the Housing and Urban Development Corporation, 7 per cent by the Cellular Concrete Factory in Tamil Nadu, 2 per cent by dock labour housing scheme, and the remaining 2 per cent by the experimental housing and statistics.

III.3.7 The outlay for urban housing was substantially enhanced to Rs. 540.92 crores in the Fifth Five Year Plan from Rs. 170.23 crores in the Fourth Plan. Out of the outlay of Rs. 540.92 crores, Rs. 450.56 (83 per cent) was in the S&UT sector, and Rs. 90.36 crores (17 per cent) in the central sector. Out of the outlay of Rs. 90.36 crores in the central sector, the scheme of office and residential accommodation accounted for 57 per cent, police housing scheme for 25 per cent, and the National Building Organisation for 2 per cent. About 1 per cent was accounted for by the dock labour housing scheme, the National Building Materials Corporation, and Hindustan Prefeb Ltd.

III.3.8 In the Sixth Five Year Plan, the outlay for urban housing was enhanced to Rs. 1127.37 crores, which was about 108 per cent higher than the outlay in the Fifth Plan. Out of Rs. 1127.37 crores, 74 per cent was in the S&UT sector and the remaining 26 per cent in the central sector. Out of Rs. 290.00 crores in the central sector, the scheme of office and residential accommodation for central government employees accounted for about 49 per cent, house building advance for 32 per cent, and HUDCO for 17 per cent.

III.3.9 In the Seventh Five Year Plan, the outlay for urban housing was Rs. 1879.31 crores which was 67 per cent higher than the outlay in the Sixth Plan. Out of the outlay of Rs. 1879.31 crores, 85 per cent was in the S&UT sector and 15 per cent in the central sector. Out of Rs. 287.87 crores in the central sector, most of the outlay was claimed by only 3 out of 11 schemes, viz., the scheme of office and residential accommodation for Central Government employees (57 per cent), HUDCO (21 per cent), and the proposed National Housing Bank (18 per cent).

III.4 Water Supply and Sanitation

III.4.1 The necessity of protected water supply, and sanitation in urban areas was recognised in the First Five Year Plan itself. At the time of launching the First Plan, only 6 per cent of total number of towns and cities, covering about 48 per cent of the total urban population had protected water supply. Further, only 23 out of 48 cities and 12 towns had

sewerage systems. However, only a limited allocation of Rs. 12.12 crores was made for urban water supply and drainage schemes in the First Five Year Plan. The total outlay was in the S&UT sector. Later on, the outlay was raised to Rs. 16.17 crores. Against this provision, water supply and sewerage schemes costing Rs. 11.85 crores had been sanctioned up to March 1955. Towards the end of 1954, a National Water Supply and Sanitation Programme was formulated by the Ministry of Health, Government of India (GOI). Under this programme, a provision of Rs. 12.72 crores was made for providing loans for urban schemes.

III.4.2 In the Second Five Year Plan, a tentative provision of Rs. 53.00 crores was made which was later revised and the outlay was fixed at Rs. 48.00 crores. Against this outlay, an amount of Rs. 31.93 crores (67 per cent of the outlay) was spent in the first three years of the Second Plan. By then, 275 water supply schemes and 61 sewerage schemes were under execution. Also, a separate provision of Rs. 10.00 crores had been in the central sector for assisting the existing city corporations in their water supply and drainage schemes. In the middle of Second Plan, schemes costing Rs. 7.36 crores were in progress under this scheme.

III.4.3 In the Third Five Year Plan, the outlay for water supply and sewerage was enhanced to Rs. 89.00 crores, which was 85 per cent higher than the outlay in the Second Plan. In the first two years of the Third Plan, 194 schemes on water supply and drainage costing Rs. 27.00 crores had been approved. Besides, 275 schemes of urban water supply and drainage that could not be completed during the Second Plan period were continued during the Third Plan period. Most of the 529 new schemes of urban water supply and sewerage costing about Rs. 139.00 crores, taken up during the Third Plan period, and 53 schemes carried over from the Second Plan were completed during the Third Plan period.

III.4.4 The schemes of urban water supply and sewerage continued during the three years (1966-69) of Annual Plans also. However, the separate outlay for urban water supply and sewerage had been indicated in only one of the three Annual Plans. The outlay in the Annual Plan of 1966-67 was Rs. 21.31 crores. As a whole, 150 new schemes at the cost of about Rs. 39.00 crores were taken up. The schemes were at the various stages of execution at the time of formulating the Fourth Plan.

III.4.5 The outlay for urban water supply and sewerage was raised from Rs. 89.00 crores in the Third Plan to Rs. 276.00 crores in the Fourth Five Year Plan, which was about 210 per cent higher than the

Third Plan outlay. This outlay was estimated to have been supplemented to the extent of Rs. 100.00 crores by loans from the LIC and market borrowings. Against the available resources of Rs. 376.00 crores, it was estimated that Rs. 380.00 crores were spent on urban water supply and sewerage schemes during the Fourth Plan period. Out of Rs. 380.00 crores, Rs. 350.00 crores (92 per cent) were estimated to have been spent on 497 new water supply schemes undertaken during the Fourth Plan period, in addition to about 200 schemes carried over from the earlier plan. The balance of Rs. 30.00 crores (8 per cent) was probably spent on sewerage schemes in 40 towns.

III.4.6 In the Fifth Five Year Plan, the outlay for urban water supply and sewerage schemes was hiked to Rs. 539.17 crores, which was 95 per cent higher than the outlay in the Fourth Plan. No firm data on the amount spent and the number of schemes undertaken and completed are available for the Fifth Plan period.

III.4.7 In the Sixth Five Year Plan, the outlay for urban water supply and sanitation was Rs. 1753.56 crores, which was 225.2 per cent higher than the outlay in the Fifth Plan. The priority during this plan period was to be given to the completion of ongoing schemes. It was expected that 930 urban water supply schemes and 120 urban sewerage and drainage schemes would be completed, and new schemes of water supply in 550 towns and sewerage schemes in 110 towns would be taken up. However, in the course of the mid-term appraisal, it was found that the expenditure against the outlay was rather low during the first three years of the Sixth Plan, and the target was unlikely to be achieved.

III.4.8 In the Seventh Five Year Plan also, the outlay for urban water supply and sanitation was substantially enhanced over that in the previous plan. The provision of Rs. 2971.25 crores in the Seventh Plan was 69 per cent higher than that in the Sixth Plan.

IV. DEVELOPMENT PROGRAMMES

IV.1 Urban Development

IV.1.1 *Town Planning* : The necessity of planned urban development was recognised in the First Five Year Plan itself. However, no specific scheme for planned development of urban areas could be initiated in the First and Second Five Year Plans. At the time of launching the First Five Year Plan, organised instruments for urban planning did not exist in India. In the initial stages of planning, the stress was, therefore, on :

- (i) Enactment of town and country planning legislation (TCPA),
- (ii) Survey of urban areas and resource regions,

(iii) preparation of master plans, and

(iv) setting up of machinery which could enforce the TCPA, conduct surveys and prepare master plans.

Accordingly, the necessity of a national TCPA was emphasised in the First Five Year Plan. In the Second Five Year Plan, it was recommended that each state should enact its own town and country planning act and set up machinery to implement it. Further, while in the First Plan, the importance of regional planning for resource regions was highlighted, in the Second Plan it was recommended that each state should have a phased programme for the survey and preparation of master plans for all important towns. In this regard, it was suggested that early attention should be paid to the cities, like Delhi, Bombay, Calcutta, Madras, Ahmedabad, Hyderabad, Kanpur and Lucknow. Further, it was suggested that survey and preparation of regional plans should be undertaken for the new urban centres like Sindri, Durgapur, Chittaranjan, Bhilai, Rourkela and Neivelli on the one hand and areas served by river valley projects, like Damodar, Bhakhranangal, Hirakud, Tungabhadra, Chambal and Koyana on the other. These issues were once again highlighted in the Third Five Year Plan and some specific actions were initiated that continued through the three annual plans (1966-69) as well. By the year 1968, almost all states had introduced town planning legislation with varying scopes.

IV.1.2 Master Plan: A provision of Rs. 5.40 crores was made for town planning and preparation of master plans in the Third Plan. This provision had been made in the central sector for 100 per cent assistance to state governments. As a result, (i) development plans for 72 urban centres were undertaken, (ii) regional studies in respect of metropolitan regions around the cities of Delhi, Greater Bombay, and Calcutta were initiated and (iii) during the period 1963-69, interim development plans for 40 cities were completed. The significant step taken by the Government of India for providing 100 per cent assistance to states for town planning and preparation of master plans in the Third Plan was discontinued in Fourth. The outlay for town planning in the Fourth Plan was reduced to Rs. 50.00 lakhs from the Rs. 5.40 crores in the Third Plan. But an additional

provision of Rs. 30.00 lakhs was made for training and research in the field of Local Self Government.

IV.1.3 Development of Urban Infrastructure : In the first two plans, no provision for the development of infrastructural facilities in urban areas had been made. It was only in the Third Five Year Plan, that a modest provision of Rs. 12.3 crores was made for this purpose. In the Fourth plan, the provision was raised to Rs. 70.00 crores which was 4.69 per cent higher than the outlay for this purpose in the Third Plan. The amount was to be utilised for giving loans and grants to local bodies for minor projects of civic importance such as pitching and draining of streets, provisions of parks and filling-up low-lying areas. The corresponding outlay in the Fifth Five Year Plan was raised by 123.9 over that in the Fourth Plan. This outlay of Rs. 156.73 crores was to be utilised for (i) providing seed capital to local authorities or development authorities, (ii) to meet the cost of surveys and staff required for the preparation of plans, and (iii) to provide financial assistance to local bodies for carrying out minor improvement schemes. The outlay in the Sixth Five Year Plan was further raised by 108.5 per cent over that in the Fifth Plan, and fixed at Rs. 326.83 crores.¹ The scope for the utilisation of this outlay was also enlarged. It could now be utilised for the development of facilities such as roads, pavements, minor civic works and other amenities like bus sheds, markets, shopping complexes and theatres, etc. also. In the Seventh Five Year Plan, the outlay for this purpose was raised substantially (by 158 per cent) to Rs. 842.00 crores.²

IV.1.4 Environmental Improvement in Slum Areas: The necessity of this scheme was highlighted in the Third Five Year Plan itself. However, at the initial stage, it was conceived as supplementary to the scheme of slum clearance and this continued to be so till the middle of Fourth Five Year Plan. It was only in 1972-73 that improvement as distinct from clearance was initiated as a separate programme in the central sector. Its object was to provide a minimum level of services, like water supply, sewerage, drainage, paving of streets and street lighting in the slum areas. Initially, the scheme was introduced in the slum areas of 8 cities with a population of 8 lakhs and more. It was later extended to 9 more cities, one in each state

1. After excluding Rs. 96.00 crores for states' share which was equivalent to the provision of Rs. 96.00 crores made in the central sector for the integrated development of small and medium towns

2. In the Table 12-5 on p. 300 the combined outlay for urban development programmes including integrated development of small and medium towns, and the national capital region in the S&UT sector was given as Rs. 1069.15 crores. But in the text p. 299, the outlay for urban development programmes including the integrated development of small and medium towns was given as Rs. 930 crores. After deducting Rs. 88 crores from Rs. 930 crores which was equal to the outlay of Rs. 88 crores made in the central sector for the integrated development of small and medium towns, the outlay for the development of urban infrastructure in the Seventh Plan comes to Rs. 842.00 crores.

where no such large towns existed. It was estimated that, with an expenditure of Rs. 30.00 crores, about 3 million slum dwellers would have benefited by the end of Fourth Five Year Plan period (i.e., March 1974). This scheme was continued in the Fifth Five Year Plan under the Minimum Needs Programme, with a provision of Rs. 50.00 crores. It was proposed to extend the scheme to all cities with a population of 3 lakhs and above, and one city/town in each state where no such large cities existed. It was expected that about 6 million slum dwellers would be covered during the Fifth Plan period. It was estimated that about 6.8 million slum dwellers would have benefited by this scheme by March 1980. This scheme has been continuing under the Minimum Needs Programme. In the Sixth Five Year Plan, a provision of Rs. 151.45 crores was made for this scheme which was more than three times that of in the Fifth Plan. Assuming a per capita expenditure of Rs. 150.00, it was estimated that about 10 million slum dwellers would be benefited during the Sixth Plan period. However, the per capita expenditure was stepped up to Rs. 250.00 in 1984. Also, the scheme was made applicable to all urban areas irrespective of the size of city/town. But it was emphasised that the priority would be given to areas (slums) inhabited by the Scheduled Castes or scavengers, etc. It was estimated that India's slum population would be 33.10 million by the end of March 1985, and that about 15.6 million of them would have benefited for improvement schemes by then in the Seventh Five Year Plan, the outlay was enhanced to Rs. 269.55 crores which was about 78 per cent higher than that in the Sixth Plan. Assuming a per capita expenditure of Rs. 300, it is estimated that an additional 9 million slum dwellers will be benefited during the Seventh Plan period.

IV.1.5 Integrated Development of Calcutta Metropolitan Area : This scheme was introduced in the Fourth Five Year Plan with a provision of Rs. 40.00 crores, which was later raised to Rs. 43.00 crores, in the plan of West Bengal. This was to be utilised for schemes relating to water supply, sewerage and drainage, roads and traffic, slum clearance, housing and urban development in the Calcutta Metropolitan area. However, the provision was substantially augmented during the Fourth Plan period itself and the total expenditure incurred on this scheme during this period was estimated to be Rs. 150.00 crores. The additional funds were made available by the Calcutta Metropolitan Development Authority (CMDA)

through new taxation, special non-plan assistance from the Government of India, and IDA assistance from the World Bank. In the Fifth Five Year Plan, the scheme was continued with a plan outlay of Rs. 143.92 crores.¹ In the Sixth Five Year Plan, the outlay was increased to Rs. 247.00 crores, which was 71.6 per cent more than the outlay in the Fifth Plan. It was further raised to Rs. 294.58 crores². In the Seventh Plan, which was only about 19.3 per cent higher than the outlay in the Sixth Plan. Since the Sixth Plan, this scheme has been continued as an externally aided scheme.

IV.1.6 State Capital Projects : This scheme was introduced during the Fourth Plan period with a provision of Rs. 35 crores under the head Miscellaneous. Under it, urban development programmes consisting of various components like bulk acquisitions and development of land, building construction programmes for offices, and housing and community services were undertaken in the state capital cities of Bhopal, Bhubaneswar, Chandigarh and Gandhinagar. The scheme has been continued since then. In the Fifth Five Year Plan, a combined outlay of Rs. 143.92 crores had been indicated for State Capital Projects and the integrated development of Calcutta Metropolitan Area (breakup not available). In the Sixth Five Year Plan, a provision of Rs. 66.00 crores was made for the implementation of this scheme in three of the four cities, viz Bhopal, Chandigarh and Gandhinagar. The provision was to be utilised for improving water supply, sewerage, roads, traffic and transportation and for area development. The outlay for the State Capital Project in the Seventh Five Year Plan document is not indicated clearly.

IV.1.7 National Capital Region : The scheme for the development of the National Capital Region (NCR) comprising Delhi and a number of towns around Delhi such as Ghaziabad, Faridabad, Ballabhgarh, Gurgaon, Bahadurgarh and Loni, through conceived in the late 1950s, could be introduced only in the early 1970s. The scheme was expected to de-concentrate the economic activities from the core of Delhi into the towns around it in the states of Uttar Pradesh (UP), Haryana, and Rajasthan. In the Fifth Five Year Plan, a modest provision of Rs. 5.09 crores was made for this scheme, which was subsequently raised to Rs. 10 crores in the Sixth Five Year Plan, and further to Rs. 35 crores in the Seventh Five Year Plan. These provisions were in the central sector, and were expected to be supplemented by investments in the NCR by the States of UP, Haryana and

1. The outlay of Rs. 143.92 crores included the provision for the State Capital Project as well.

2. The outlay for the integrated development of the Calcutta Metropolitan Area, including the outlay for the State Capital Project, is given as Rs. 294.58 crores in the Table 12.5 on p. 300 of the Seventh Plan document, while the same in the text on p. 299 is given as Rs. 317.58 crores.

Rajasthan on the one hand and central ministries (other than the Ministry of Works and Housing—now Ministry of Housing and Urban Development) of the Government of India on the other.

IV.1.8 Integrated Development of Small and Medium Towns : This scheme was introduced in the Sixth Five Year Plan for the development of infrastructural and other facilities in the small and medium towns. It was sponsored by the Government of India in the belief that the development of these categories of towns had been neglected in the earlier plans and there was a need to equip them in a manner that would enable them to serve as growth and service centres for their rural hinterlands. A provision of Rs. 96 crores for this scheme was made in the Sixth Plan in the Central Sector. It was expected that, with matching contributions from the state governments, about Rs. 200 crores would thus be available for the development of about 200 towns during the Sixth Plan period. Towns with a population of less than one lakh were eligible for assistance from the Government of India provided matching contributions were forthcoming from the state governments or implementing agencies. However, the target could not be achieved as indicated by the release by the Government of India of only about Rs. 61 crores against the Rs. 96 crores that had been allotted for this purpose. A variety of short-comings, such as non-transfer of central assistance to implementing agencies by many state governments, non-utilisation of received funds by the implementing agencies in many cases, delay in land acquisition and technical incompetence of the implementing agencies for the purpose intended were noticed in the course of implementation of this scheme. Perhaps, because of the underutilisation of the outlay in the Sixth Plan, the outlay for the scheme was reduced to Rs. 88 crores in the Seventh Five Year Plan. Also, all towns with a population of less than three lakhs, instead of those with a population of less than one lakh in the Sixth Plan, were made eligible for assistance from the Government of India. Further, it was suggested that while selecting towns for assistance under the scheme, an additional criterion, based on the town's antiquity, aesthetic character and historic association would also be adopted.

IV.1.9 In addition to this the schemes of urban development discussed above, several others were also evolved and implemented during the Five Year Plan periods. One of such schemes was the Integrated Urban Development Project which was evolved and implemented in the Fifth Five Year Plan with an outlay of Rs 149.51 crores. This scheme was in the central sector and was discontinued in April 1979. Another such programme is the scheme

of Urban Community Development which was taken up as a pilot project by the Government of India in collaboration with state government in the Annual Plans of 1967-68 and 1968-69. It was subsequently given up in the Fourth Plan, and was again revived in Seventh Plan with an outlay of Rs 5.00 crores in the central sector. A scheme on the Removal of Cattle in Calcutta was taken up in the Sixth Plan with an outlay of Rs 2.35 crores in the central sector. While the scheme has been continuing in the Seventh Plan, the outlay has been reduced to Rs 1.50 crores. A scheme on the Development of Displaced Persons Colony was started in the Sixth Plan with a provision of Rs. 5 lakhs in the central sector. The outlay for this scheme was increased to Rs 1.50 crores in the Seventh Plan. Also, some provisions were made in the central sector in the Fifth, Sixth, and Seventh Plans for financing research etc. in the field of urban development. The outlays were Rs. 21 lakhs, Rs 1.6 crores, and Rs 2.01 crores in the Fifth, Sixth and Seventh Plans respectively.

IV.2 Urban Housing

IV.2.1 Shortage of houses in urban areas has been recognised as a major problem of urbanisation in India. Accordingly, a number of schemes for providing houses in urban areas have been evolved and implemented since the inception of Five Year Plans. The overall approach has been to provide houses to economically weaker sections on a priority basis without overlooking the housing requirements of the other sections of society. Efforts have been made to promote construction of houses by (i) providing subsidies to industrial workers, (ii) providing housing loans at reasonable rates of interests, (iii) providing housing sites through the acquisition and development of land by public authorities, (iv) controlling the supply of building materials, and (v) evolving and demonstrating improved building techniques for reducing the cost of construction, etc. For this, organisations like Housing Boards, the Housing and Urban Development Corporation, and the National Building Organization have been set up. It has been proposed in the Seventh Five Year Plan to set up a National Housing Bank. The various schemes evolved and implemented during the Five Year Plans for augmenting the supply of houses in urban areas are discussed in the following paragraphs.

IV.2.2 Subsidised Housing for Industrial Workers : This scheme was introduced in September 1952 and has since been continued. Under it, the Government of India provides subsidies and loans to (i) state governments, (ii) employers of industrial workers and mines workers, except coal mines and mica mines, and (iii) cooperative societies of industrial

workers for the construction of houses. In the beginning, the state governments were being given 50 per cent of the cost of construction, including the cost of land, as subsidy and 50 per cent as loan. The same in the case of private employers were 25.0 per cent as subsidy and 37.5 per cent as loan, and in the case of cooperative societies of industrial workers, 25 per cent as subsidy and 50 per cent as loan. These provisions were revised in 1958 and loan assistance to private employers was enhanced from 37.5 per cent to 50 per cent, and the same in the case of cooperative societies of industrial workers was enhanced from 50 per cent to 65 per cent.

IV.2.3 *Income Group Housing* : This scheme was introduced in November 1954 and has continued since then. Under the scheme, long-term housing loans at reasonable rates of interest are provided to persons whose annual income does not exceed Rs. 6000 and to cooperative societies whose members fulfil this condition. The quantum of loan assistance is 80 per cent of the total cost of construction or Rs 8000, whichever is less. The Seventh Five Year Plan recommended the raising of these ceilings. It was suggested that the range of beneficiaries should be widened to include all those in the monthly income range, Rs. 701—1500, and that the ceiling on loans should be raised to Rs 23,000.

Under this scheme, loans are provided also to the state governments for the acquisition and development of land and its allotment to prospective builders. Assistance under this scheme is given also to the local bodies, public institutions run on no-profit no-loss basis, recognised health, charitable and educational institutions.

IV.2.4 *Rental Housing* : This scheme was introduced in 1962-63 for the benefit of persons belonging to the weaker sections (i.e., in general, a person with a monthly income of Rs. 175 or less and Rs. 250 or less for those living in the cities of Bombay, Calcutta and Delhi). In the Seventh Plan, it was recommended that the monthly income ceiling should be raised to Rs. 700.00.

IV.2.5 *Middle Income Group Housing* : This scheme was introduced in February 1959 to be financed entirely by funds made available by the Life Insurance Corporation (LIC) of India.

Persons with an annual income between Rs. 6000 and Rs. 12,000 are eligible for loan assistance limited to 80 per cent of the cost of construction up to a maximum of 16,000, enhanceable to Rs. 20,000.00 for those who do not already possess a plot of land. Under the scheme, the LIC also provides loans at an

interest of 5.0 percent to state Governments, to be repaid in 25 years. In the Seventh Plan, it was recommended that the income range of beneficiaries should be upgraded to those earning between Rs. 1501 to Rs. 2500 a month, and that the ceiling on loan assistance should be raised to Rs. 40,000.

IV.2.6 *Rental Housing for State Government Employees* : This scheme was introduced in February 1959 to assist state governments in providing housing facilities to their low-paid employees. Under the scheme, the LIC provides loans to the state governments at an interest of 5.0 per cent repayable over a period of 20 years.

IV.2.7 *Slum Clearance* : This scheme was introduced in May 1956 and has been continuing since then. State governments were required to acquire slum areas for demolition and clearance. At the same time, houses were to be provided to erstwhile slum dwellers for their rehousing provision of financial assistance to state governments was made for this purpose. Under the provisions of the scheme the Government of India was to provide 25 per cent of the cost as subsidy and 50 per cent as loans, repayable over a period of 30 years, to state governments, which were required to provide the remaining 25 per cent of the cost as subsidy from their own means. The subsidy contribution from the Government of India was, later on, raised to 37.5 per cent of the cost. In the beginning, the slum clearance effort was mainly concentrated in the six cities, viz., Bombay, Calcutta, Delhi, Madras, Kanpur and Ahmedabad. However, in the Third Plan, it was proposed that slum clearance and improvement work could be taken up wherever state government considered that a slum problem existed in acute form. The main problems in the implementation of this scheme have been (i) the delay involved in the acquisition of slum areas, (ii) non-availability of alternative sites at reasonable cost near the existing places of work, and (iii) the reluctance on the part of slum dwellers to move away from the area in which they have been residing.

IV.2.8 *Housing for Dock Labour* : This scheme was introduced in the Third Five Year Plan and has been continuing since then. Initially, a provision had been made, in the Third Plan, to provide 20.0 per cent of the cost of a house as subsidy and 35.0 per cent of the cost as loan assistance (subject to a prescribed ceiling) to Dock Labour Boards at Bombay, Calcutta, and Madras for the construction of houses for the workers registered with them. Later, in the Fourth Plan, subsidy assistance was raised from 20 per cent to 25 per cent, and loan assistance from 35 per cent to 50 per cent. Thus, the contribution to be made by the Dock Labour Boards was reduced from 45 per cent to 25 per cent of the cost.

IV.2.9 *Land Acquisitions and Development* : This scheme was introduced in 1959 for providing loan assistance to state governments for acquiring and developing land. The acquired and developed land was to be utilised for building houses under various schemes and the provision of related community facilities like schools, hospitals, parks, playgrounds, and shops. Initially, the scheme was fully financed by the funds made available by the Government of India, but, from 1962-63, the LIC started providing loans for the scheme to state governments.

IV.2.10 Among other urban housing schemes under implementation are the scheme for office and residential accommodation for central government employees and house building advances for the latter.

IV.3 *Urban Water Supply and Sanitation*

IV.3.1 The necessity of safe and adequate water supply as well as the collection and disposal of community wastes in urban areas was recognised in the First Five Year Plan itself. At the time of launching it only 6.00 per cent of the total number of towns in India, covering 48.5 per cent of the total urban population, were reported to have protected water supply. Further, only 23 out of 48 cities and 12 towns had a sewerage system. Against this, it was estimated in the Seventh Five Year Plan that about 81 per cent of urban population would have been provided with water facility and 33 per cent with sanitation facilities by the end of Sixth Plan. Thus, while there has been considerable progress in providing protected water supply in urban areas during the plan period, the same cannot be said about sanitation facilities.

IV.3.2 The programme of urban water supply and sanitation was launched in the First Five Year Plan with a provision of about Rs. 13 crores. Later, a National Programme on Water Supply and Sanitation was formulated by the Ministry of Health, towards the end of 1954. Under the Scheme, loans were to be made available for water supply schemes in urban areas. During the First Plan period, Rs. 12.00 crores were made available as loan under this scheme. However, progress on the urban water supply and sanitation programme during the First Plan period was considered unsatisfactory. The lag was attributed to (i) the shortage of materials like pipes, pumps and other equipment, (ii) inadequate transport facilities, and (iii) the absence of adequate public health engineering staff in the state to plan and execute the schemes.

IV.3.3 In the Second Five Year Plan, a provision of Rs 48 crores was made for urban water supply and sanitation. Also, an additional provision of Rs 10.00 crores was made in the central sector for assisting the

water supply and sanitation schemes of the urban areas that had corporations. The priorities accepted for the selection of urban areas during the Second Five Year Plan were (i) the municipal areas without any protected water supply arrangements, (ii) the improvement or expansion of existing facilities for water supply in urban areas where the existing arrangements were either inadequate or unsafe from the public health point of view, (iii) pilgrim centres, and (v) the areas having piped water supply and therefore requiring new sewerage or improvement of existing sewerage to remove waste and eliminate hazards to public health.

IV.3.4 The shortfall in carrying out the various water supply and sanitation schemes during the period of First and Second Plans were attributed to (i) shortage of trained personnel, (ii) inadequate organisation and planning, and (iii) lack of materials.

IV.3.5 Based on the experiences gained through the implementation of water supply and sewerage schemes during the first two plans, it was suggested in the Third Five Year Plan that the schemes, especially the larger ones, should be phased carefully so that the returns on outlays could be realised at each stage. Further, it was suggested that the dispersing of funds too thinly over a large number of schemes should be avoided, and that, a project was accepted, the concerned municipal body should not only accept the responsibility for its maintenance but also contribute towards the cost of construction to a certain extent. The necessity of well organised Public Health Engineering Departments in the states was emphasised once again. Further, the setting up of statutory water and sewerage boards, empowered to float loans and levy cesses, for undertaking water supply and sewerage schemes was suggested. The need for paying greater attention to providing drainage and sewerage, and arranging for safe disposal of sewage in towns and cities was emphasised. It was suggested that 20 to 80 per cent of the estimated cost of water supply projects in cities with a population of 100,000 should be set apart for sewerage schemes. A provision of Rs 89 crores was made for urban water supply and drainage schemes in the Third Plan. For the selection urban areas for assistance, the policy as outlined for the Second Plan was accepted for the Third Plan as well. Most of 529 new urban water supply and sanitation schemes taken up in the Third Plan, in addition to 53 schemes continuing from the Second Plan period, were completed during the Third Plan period. During the period of three Annual Plans (1966—69), 150 new schemes were taken up and were in various stages of execution at the beginning of the Fourth Five Year Plan.

IV.3.6 A provision of Rs 276 crores was made for urban water supply and sanitation schemes in the Fourth Plan. This was to be supplemented by loans from the LIC and market borrowings, which were estimated to be around Rs 100 crores. The total expenditure during the Fourth Plan period was estimated to be around Rs 380.00 crores of which Rs 350.00 crores might have been spent on water supply schemes and Rs 30.00 crores on sewerage schemes in 40 towns. It was suggested, in the Fourth Plan, that the water supply schemes in urban areas should be viewed as a service which has to be paid for by the direct beneficiaries through capital contribution and water charges. Further, it was suggested that sewerage schemes, being very costly, cannot be self-financing, and, therefore, it should be possible to treat them as combined utility with water supply.

IV.3.7 The objectives of the water supply and sanitation programme in the Fifth Five Year Plan were (i) to intensify efforts for provision of water supply in urban areas, and in particular, to ensure the completion of spill-over schemes; (ii) to increase the efforts for conversion of dry latrines into sanitary latrines in unsewered areas; (iii) to promote and demonstrate modern methods of garbage collection and disposal; (iv) to initiate regulatory and other measures for water and air pollution control; and (v) to continue the efforts for providing training to public works and health engineering staff at various levels.

IV.3.8 In order to make urban water supply financially viable it was suggested that, along with measures to increase water rates or municipal taxes, the state governments should examine possibilities of imposing ad-hoc capital levies on the beneficiaries to raise the necessary finances. A provision of Rs 539.17 crores had been made for urban water supply and sanitation schemes in the Fifth Five Year Plan. Further, it was stated that this outlay would be supplemented by the provisions made under the scheme of integrated development of the Calcutta Metropolitan Area and the integrated Urban Development Project, for which provisions of Rs. 153.92 crores and Rs. 149.57 crores respectively had been made in the Fifth Plan.

IV.3.9 In the Sixth Five Year Plan, it was observed that water supply and sewerage programmes should be considered an integral part of urban development. It was emphasised that there was a need to pay greater attention in the Sixth Plan to the water supply and sanitation needs of small and medium sized towns, that had been neglected in the earlier plans, without ignoring the need of priority areas in the larger cities. Further, it was suggested that the

Town and Country Planning Organisations of States should ensure that adequate provision was made for water supply and sewerage facilities in the formulation and implementation of master plans for towns and cities.

IV.3.10 A provision of Rs. 1753.56 crores was made in the Sixth Plan for water supply and sanitation schemes. About 930 water supply schemes and 120 sewerage and drainage schemes were expected to be completed, and the new schemes of water supply in 550 towns and sewerage schemes in 110 towns were expected to be taken up during the Sixth Plan period. Also, a pilot project, under the UNDP Global Project, to provide low-cost water-seal latrines with on-site disposal of human wastes were to be taken up in the States of Assam, Andhra Pradesh, Bihar, Gujarat, Maharashtra, Tamil Nadu and Uttar Pradesh.

IV.3.11 Despite the emphasis on providing water supply and sanitation schemes in small and medium sized towns on a priority basis, these towns continued to suffer during the Sixth Plan period. This neglect was attributed to resource constraints and the emphasis on the provision of water supply in rural areas.

IV.3.12 However, it was observed in the Seventh Plan document that the water supply and sanitation needs of small and medium sized towns could not be ignored any longer, and efforts to meet them would be made in the Seventh Plan to the extent possible. A provision of Rs. 2935.64 crores was made for urban water supply and sanitation schemes in the Seventh Plan. To overcome the resource constraint, the setting up of a National Urban Infrastructure Development Finance Corporation was proposed. For this purpose, a provision of Rs. 20.00 crores (in addition to Rs. 35.00 crores made from the urban development fund) was made for capital contribution to the proposed Corporation. Also, the necessity of cheaper methods of sanitation in small and medium town was emphasised, and the additional resource (i.e., 50.0 per cent of the cost) for the Low Cost Latrine Projects was to be made available by HUDCO.

V. CONCLUSIONS AND SUGGESTIONS

V.1 *Urban Policy Dimensions*

A review of the seven plans with reference to urban policy shows that the plan approach and policy towards urban development have emphasised :—

- (i) *Establishment of basic infrastructure for urban planning* :—(a) Adoption of Town and Country Planning Acts at the national level and state level, (b) setting up or town

planning organisations in each state, and (c) expansion of training facilities for town planners and architects;

- (ii) *Preparation of master plans and regional plans and their implementation* :—(a) survey and preparation of master plans for cities and towns and regional plans for resource regions, (b) planning for the development of urban areas in their regional context, (c) integrated implementation of all development plans having a bearing on urban development, making legal provisions for the implementation of regional plans by local authorities, and (c) integration of physical plans with investment plans;
- (iii) *Balanced Urban Development* :—(a) Adopting policies for slowing down the growth of metropolitan cities, (b) promoting the development of small and medium towns and cities; and enlarging the scope and functions of industrial townships;
- (iv) *Specific schemes for improving urban environment* :—(a) clearance and improvement of slums, (b) augmentation of civic services, (c) augmentation of housing stocks, and (d) provision for water supply and sanitation;
- (v) *Improving urban administration* :—(a) review and rationalisation of municipal administration, (b) establishment of urban development authorities, (c) reform of municipal tax system, and (d) control of the value of urban land;
- (vi) *Establishment of supporting institutions* :—(a) HUDCO, (b) National Building Organization, (c) the planned National Housing Bank and (d) the proposed National Urban Infrastructure Development Corporation; and
- (vii) *Establishment of and support to institutions* :—For carrying out research in the field of urban development.

V.2 Urban Development Programmes

V.2.1 The policy measures listed in the preceding section were evolved at different stages during the seven plan periods. Despite all these policy measures, an integrated approach to urban development is yet to emerge. Also, the efforts made to translate most of these policies into programmes of action in the various Five Year Plans have not been adequate and effective.

V.2.2 The regional approach to planning for urban development has been emphasised since the Second Five Year Plan and numerous plans for urban development have been formulated so far. However, there has been little evidence of a regional approach to urban development being followed in the Five Year Plans. It was only in the Sixth Plan that the issue of inter-regional and intra-region variations in the process of urbanisation was highlighted. Even then, no action programme was evolved at the national level to guide the process of urbanisation in different regions.

V.2.3 The low priority accorded to a regional approach to planned development of urban areas can best be illustrated by none other than the planned development of the National Capital Region (NCR). The idea of planned urban development of the NCR was mooted as early as in the late 1950s with a view to deconcentrate economic activities from the core of Delhi City into the towns around Delhi in the states of U.P., Haryana and Rajasthan. However, a development programme for this purpose could be introduced only in the early 1970s. A meagre provision of Rs. 5.09 crores was made for this scheme in the Fifth Plan, which was raised to Rs. 10.00 crores in the Sixth and Rs. 35.00 crores in the Seventh Plan. However, no details are available as to how much investment for various purposes has already been made in the NCR by different ministries of the Government of India and the concerned state governments in the Fifth and Sixth Plans, and how much investment for different purposes they would be making during the Seventh Plan period. Also, no priority investment areas into the town around Delhi that would act as catalysts in deconcentrating economic activities from the core of Delhi City have been indicated in the plan documents. The position is similar with regard to the policy statement on an integrated implementation of all the development programmes having a bearing upon urban development.

V.2.4 For about two decades since the launching of the First Five Year Plan in 1951, efforts at planned development of urban areas remained confined to the enactment of Town and Country Planning Acts, setting up of town planning organisations at the national level and state level, and survey and preparation of development plans. The usefulness of town planning organizations has been questioned because of their orientation solely towards physical planning. The current view stresses that town planning organizations should have personnel from all relevant disciplines, that an inter-disciplinary approach should be followed for the preparation of development plans for urban area so that the physical components of the plans could match availability of resources and investment plans.

V.2.5 It was in the Third Plan that the pattern of economic development and the general approach to industrial location were considered to be the most decisive factors in the process of urbanisations. Accordingly it was suggested that, as far as possible, new industries should be established away from the large and congested cities in order to slow down their growth. In the Fourth Plan, the necessity of preventing further growth of population and decongestion and dispersal measures in the cities like Bombay and Calcutta, was highlighted. Efforts to tackle the problems of metropolitan cities on a more comprehensive and regional basis were initiated in the Fifth Plan. In the Seventh Plan, slowing down of the growth of big metropolises was suggested as one of the constituents of urban policy.

V.2.6 Despite all these policy statements, the large cities have witnessed unabated growth since independence. The number of million-plus cities in India increased from 5 in 1951 to 7 in 1961, 9 in 1971, and 12 in 1981. There is a possibility of this number being almost doubled in 1991. In 1981, only 12 million-plus cities accounted for 27 per cent of the total urban population. Another 204 cities accounted for 33 per cent of the total urban population. Thus, 216 cities out of the total of 3,245 urban centres (i.e. about 7 per cent of urban centres) accounted for over 60 per cent of the total urban population in 1981.

V.2.7 The need for exploring the potentialities of developing existing small towns was recognised in the Fourth Plan. Promoting the development of small towns was stated to be one of the objectives of planned urban development in the Fifth Plan. However, it was only in the Sixth Plan that a scheme for the development of small towns was introduced. Under this scheme of Integrated Development of Small and Medium Towns (IDSMI), about 200 towns with a population of less than one lakh were expected to be developed during the Sixth Plan period, with a provision of Rs. 96.00 crores in the central sector with matching contributions from the concerned state governments. The lack of planning for urban development in the country is reflected in the fact that, despite the acute shortage of infrastructural and other facilities in small and medium towns and the number of such towns being 3,029 in 1981, even the provision of about Rs. 200.00 crores could not be utilised in a period of five years. Consequently, the provision for this scheme was scaled down to Rs. 88.00 crores in the central sector with matching contributions from states. Also, the size of the eligible towns was upgraded to 3 lakh population in the Seventh Plan.

V.2.8 Similarly, water supply and sanitation facilities in small and medium sized towns were to be provided on a priority basis during the Sixth Plan period. However, these towns continued to suffer as ever before. This neglect was attributed to resource constraints and the emphasis on providing safe drinking water facilities in rural areas. It has once again been stated in the Seventh Plan that the provision for water supply and sanitation in small and medium sized towns can no longer be neglected and efforts would be made, during the Seventh Plan period to provide them. However, it is doubtful, in the absence of any comprehensive plan, whether the fate of these towns would be any different, during the Seventh Plan period, from what it has been so far.

V.2.9 The emphasis in the various programmes of urban development, evolved and implemented during each plan period, has been on meeting shortages of a variety of infrastructural and other facilities in the cities and towns rather than on stimulating their development. These programmes can broadly be grouped into three categories (i) area specific, (ii) scheme specific, and (iii) general. Examples of area specific schemes are the development of the CMA, MCR, and state capital cities, viz., Bhopal, Bhubaneswar, Gandhinagar and Chandigarh. The scheme specific programmes are mainly; with regard to housing facilities, clearance and improvement of slums, and the development of small and medium sized town. The general schemes include the provision of plan resources for the improvement of urban infrastructural facilities in general and for providing water supply and sanitation facilities.

V.2.10 In the first two Five Year Plans, the total outlay for development of urban areas was claimed by urban housing and urban water supply and sanitation. These two components accounted for 96 per cent and 85 per cent of the outlay in the Third Plan and Fourth Plan respectively. In the Fifth Plan, the combined outlay for these two components was substantially reduced to 68 per cent. The same in the Sixth Plan and Seventh Plan were 74 per cent and 73 per cent respectively. In addition to this, a good proportion of the outlays for the integrated development of the CMA, State Capital Projects, Integrated Urban Development Project, Integrated Development of Small and Medium Towns, and the development of MCR would have been spent on urban housing and urban water supply and sanitation. Thus, the bulk of plan resources for urban development has been claimed by these two components. But, despite this lop-sided distribution of plan resources, the shortage of houses and water supply and

sanitation facilities in urban areas continues to be acute.

V.2.11 The existing formats for presenting plan outlays under different heads do not give a clear picture of the provision made for the development of infrastructural and other facilities in urban areas. The outlays are broadly grouped into (i) urban development, (ii) urban housing, and (iii) urban water supply and sanitation. However, within the group, 'urban development', there are several area development programmes, like Integrated Development of the CMA and the Development of State Capital Cities. In all these area development programmes, a good proportion of the plan outlays is spent on urban housing and urban water supply and sanitation. But these planned expenditures are not included in the outlays for urban housing and urban water supply and sanitation indicated separately in the plan documents. This leads to an underestimation of actual plan outlays for them and overestimation of the outlays for other infrastructural facilities.

V.2.12 Also, the development of other infrastructural facilities, like telecommunication, medical facilities, electricity, transport etc., that are provided in urban areas by different departments of the central and state governments are neither planned nor is the investment to be made on them included in the plan outlays for the development of urban areas. Further, it is not clear whether the investments to be made by the local bodies, like municipal authorities are included in the plan outlays for urban development.

In this situation, the outlays and programmes for the development of infrastructural facilities and other stated in the Five Year Plan documents can hardly give a clear picture of the investment for urban development made even in the public sector, leave aside investments made in the private sector. This only highlights the lack of an approach through which the sectoral outlays and development programmes could be integrated into an area framework.

V.2.13 The Five Year Plan documents, Annual Plan documents, and the Mid-Term Appraisal documents of Five Year Plans do not provide information on the requirement, availability, and shortage of various urban infrastructural facilities by states, districts, and the size classes of towns and cities. The same is true with regard to the physical and financial targets and achievements. Of late, there has been a tendency not to provide information even in plan outlays separately for major schemes of urban development, particularly with regard to the development schemes of states and UTs, that account for the bulk of plan outlays for the development of urban areas. In such a situation, it is possible neither to make any

useful assessment of the investments made and progress achieved nor to make any reliable projection of the investment required for urban development in the future.

V.2.14 As a whole, the process of planning for urban development so far can, at best, be described as 'abstract planning'. So far, no system has been evolved through which, (i) the requirement, availability and shortage of infrastructural and other facilities in urban areas could be estimated on a long term basis at the city/town, district, state, and national level; (ii) the requirement and availability of financial resources with local and development authorities, state governments and the central government for urban development at different stages of planning could be estimated; (iii) the physical and financial targets for different schemes of urban development could be monitored and evaluated; (iv) the factor causing shortfall and also those contributing to the achievements of targets could be identified and (v) the strategies for the future could be worked out.

V.2.15 From the preceding discussion, it is obvious that no deliberate effort has so far been made to link the process of urbanisation with the general pattern of economic development and the location of industries. Similarly, there is little evidence to suggest that the regional approach to planning for urban development has been accorded due importance during the succeeding planned periods. Also, the twin objectives of planned urban development viz., (i) the slowing down of the growth of large metropolitan cities, and (ii) the development of small and medium sized towns and cities, have, largely, remained unfulfilled. By and large, the efforts at planned development of urban areas have concentrated on the augmentation of infrastructural facilities and other services in the relatively large cities. However, the available information does not facilitate as assessment of even the investment made so far in the various infrastructural facilities and other services and the progress achieved by states, districts, and the size classes of towns and cities. While the investment outlays made in the Five Year Plan are not related to the requirements of physical infrastructure at the town/city level, the physical plans formulated at the town/city level have not generally taken into account the investment implications.

V.3 Suggested Strategy

V.3.1 As a whole, policy statements on planned urban development have been appropriate keeping in view the prevailing socio-economic situation in the country. However, no adequate effort has been made to translate these policy statements into programmes of action. The stress in the following paragraphs is, therefore, on strategies for doing so rather than on changing existing policies.

V.3.2 First of all, a clear-cut distinction must be made between the growth of an area and the growth of a particular sector of the economy.

An area is a spatial unit where the different sectors economy converge. As such, the functional characteristic of an area is determined by the aggregate functions of all the sectors of economy that converge in that area. The development of an area, therefore, requires a deliberate coordination of the development of all the sectors of its economy. Such an integrated approach to the planned development of urban areas has been conspicuous by its absence. Of course, the coordination of the development of all sectors in an urban area is not an easy task. But it is possible to simplify this task by identifying the 'key sectors' that exert or that have the potential to exert the greatest influence on the course of development of an urban area. Once the key sectors and subsidiary sectors have been identified, the development of subsidiary sectors can be well planned and coordinated along with the planned development of the key sector. However, the key sectors need not be the same for all urban areas and may vary from one urban area to another. Also, the key sectors may vary from one period of time to another for the same urban area.

V.3.3 Once the key sectors have been identified, the increase in, reduction in, or withdrawal of supporters that promote; the development of these sectors should be decided on in the light of the objectives for a given urban area. In the large metropolitan areas where growth has to be slowed down, the supports that promote growth of key sectors should be reduced or withdrawn completely. The reverse should be done in the case of small and medium sized towns and cities, where growth has to be promoted.

V.3.4 This implies that the urban areas where growth has to be slowed down and those where growth has to be promoted would have to be identified and listed in a priority order. While the number of large and metropolitan cities where growth has to be slowed down are few and obvious, it would not be easy to identify and list the small and medium sized towns and cities where growth has to be promoted. However, such towns and cities can be identified on the basis of :—

- (i) the growth centres (over 100) identified by the National Committee on the Development of Backward Areas for industrial development;
- (ii) the growth centres identified in the no-industry districts;

(iii) the towns where large scale industrial units are to be located (examples of such towns are the six small towns in the states of Madhya Pradesh, Rajasthan and Uttar Pradesh where gas-based fertiliser factories are being established, Hazipur town in Bihar where electronic industries are being developed on a large scale, and Kaiga in Karnataka where an atomic power plant is to be set up. Similarly, there could be a number of towns where industrial units under central and state public sectors, joint sector, and private sector are to be established); and

(iv) the towns and cities to be developed for tourism.

V.3.5 All such towns and cities where there is a proposal for large scale development investment should be selected for urban development under the scheme of Integrated Development of Small and Medium sized towns and cities. This would help integrate investment as economic activity, and investment on urban infrastructure. The ministry, department, institution or undertaking that is going to make large investments in such towns and cities can be designated as the 'lead' ministry or department or institution or undertaking. The Ministry of Urban Development, in collaboration with the 'lead' organisation should (i) get a techno-economic survey of the concerned town or city conducted, and (ii) get a long-term as well as medium term development plan for the town or city and its hinterland prepared. Based on the development plans, the Ministry of Urban Development and the 'lead' organisation at the national level and their counterparts at the state level should mobilise the support of all other Ministries, Departments, financial institutions and others. The responsibilities of all these organisations should then be fixed for the implementation of the development plans.

V.3.6 At the local level, there should be a Local Development Authority (LDA) which, in collaboration with the 'lead' organisation, would be responsible for the coordination and implementation of the development plan. At the state-level, the counterpart of the Urban Development Ministry and the concerned 'lead' organisation would coordinate, monitor and evaluate these development plans. A similar arrangement would be made at the national level.

V.3.7 Similarly, the 'lead' organisation should be identified and necessary arrangements made at the local, state, and national level for evolving, implementing, coordinating and evaluating measures for slowing down the growth of large metropolitan cities.

V.3.8 An information system to overcome problems arising out of the information deficiencies discussed earlier should also be evolved and implemented.

**PATTERNS OF URBANISATION
AND
A STRATEGY FOR URBAN DEVELOPMENT IN INDIA**



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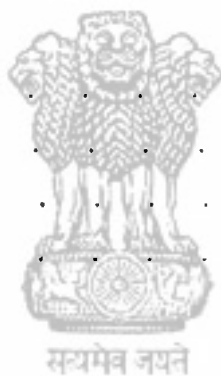




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Urbanisation, The Commission and the Present Study

1.1.1 The first four points in the terms of reference given to the National Commission on Urbanisation are as follows :

- (i) To examine the state of urbanisation in the country with reference to the present demographic, economic, infrastructural, environmental, physical, shelter, energy, communication, land, poverty, aesthetic and cultural aspects;
- (ii) To identify priority action areas, make projections of future needs and estimate available resources;
- (iii) To formulate and recommend basic guidelines for the specific action plan in each of the identified priority action areas;
- (iv) To evolve and recommend policy frames and suggest basic approaches for the encouragement of manageable urbanisation.

1.1.2 To fulfil this responsibility, the Commission, in its *Interim Report*, released in January 1987, attempts an 'Overview' of the process and pattern of urbanisation and identifies areas of distortion in the urban structure and the regions where urban support is absent or inadequate. Although the Commission refuses to share the 'alarmist view' on urban growth in India, it recognises serious distortions in the urban system. It admits that 'these distortions manifest themselves in myriad ways' that could be categorised as under :

- (1) Distortions arising out of lop-sided investment.
- (2) Distortions arising out of wrong priorities.
- (3) Distortions arising out of overstressing of urban systems in certain cities, where localised pressures have built to explosive proportions.
- (4) Distortions arising out of an inadequacy of infrastructure.

- (5) Distortions arising out of inefficiencies of management and defects in the legal systems.

1.1.3 A concern for these distortions and a confidence that these can be corrected through appropriate policy measures and that the urbanisation process is 'globally manageable' has prompted the Commission to sponsor a series of studies to identify the nature of the distortions and the factors responsible for them. It would, therefore, be unfair to attribute some sort of complacency to the Commission with regard to the process of urban growth and urban structure in the country. The Commission 'has found there to be disconcerting gaps in the basic facts about urbanisation and even more so in the processes that generate it'.

1.1.4 The present study analyses the temporal and regional patterns of urbanisation, identifies the distortions in the settlement hierarchy and the regions where urban growth has been inadequate. It may be taken as an attempt to fill these gaps. The study also attempts to determine the factors responsible for the fast and slow growth of cities and towns in various size-categories through a detailed statistical analysis. The study has been conducted with a view to evolve a strategy for effective intervention by the government, to bring about desired changes in the settlement hierarchy and a more balanced distribution of towns, compatible with the development strategy of the Seventh and the future Five Year Plans. It identifies economic factors, infrastructural components and civic amenities that are backing up the demographic expansion in the fast-growing cities and towns. It also brings out the factors responsible for slow growth or stagnation of a large number of urban centres in different regions of the country. The purpose of doing this is to help the Commission and the Government in designing an urban development strategy and also in giving content to many of the programmes and schemes initiated at central and state levels for urban development.

1.2 The study as approved by the Commission is to cover the following themes and sub-themes :

1. Evolution of urban structure through the colonial period.
2. Trends in urbanisation : Analysis of urban growth by size category of urban settlements.
3. The regional pattern of urbanisation and identification of problem areas.
4. Fast growing and stagnating urban centres and their spatial distribution—implications for an urban development strategy.
5. Medium, small and new towns in regional economic development.
6. Trends in migration and their impact on urban structure.
7. Policy perspectives.

Although the discussion is organised in six separate chapters, all the seven aspects have been covered in this report.

1.3 Following the discussion on spatial distribution of cities and towns growing at a rate higher than the national average during 1971—81, the National Commission observes in section 2.5 of the *Interim Report* that 'not only does this represent a fairly well-balanced distribution of urban settlements but that growth is also equitably distributed'. This has created some confusion in the present debate on the *Interim Report* as also the general debate on urbanisation in the country. This has been interpreted by a section of scholars and administrators as encouraging government to adopt a complacent attitude towards the process of urbanisation, which seems to be against the spirit of the analysis in the *Overview* chapter. It is indeed true that several international development-cum-financing agencies including the World Bank, have been advocating the view that urban hierarchy and changes in urban hierarchy in India (as also in several other, developing economies) pose no major problem for the spatial system. They have also been warning against any major intervention by government to alter the growth-pattern of urban centres belonging to a different size-classes, as it is likely to be expensive, inefficient and ineffective in the long run.

1.4 This policy perspective has the support of a section of Western scholars who believe that urban structure in the large countries must follow a well-defined pattern and attempts to alter this in any big way would be futile. Brian Berry (1964) argued that 'the rank size regularity applies throughout the world for countries which are highly developed with high degree of urbanisation, for large countries and countries such as India and China, which in addition

to being large, also have long urban traditions'. Mills (1972) observed that 'the relationship between urban area size and rank is one of the most remarkable in all social sciences. Intuition tells us that some powerful mechanism must be at work.' He went on to argue further that the growth rates of population in towns of different size-categories tend to be uniform. Distortions occur when a few factors mould the urban system. However, when many factors operate in many ways, growth rates tend to be similar across the size-categories. The Task Forces on Housing and Urban Development (1983) set up by the Planning Commission accepted this proposition and attempted to substantiate it through statistical analysis. Recomputing the growth rates of population of towns in different size-classes, using the population figures of only those towns belonging to a size-class in the base year (as opposed to the method used by the Population Census to compute the growth rates), it came rather hastily to the conclusion that 'the overall settlement pattern continues to be stable and well distributed.

1.5.1 Let us ask a question : Can the growth of 555 towns above the national average of 46.02 per cent and their locations in different states and regions in India, be taken as evidence of a 'well balanced distribution of urban settlements' and of urban growth being 'equitably distributed'? If the average of urban growth rates (the figure being obtained by averaging the growth rates of towns) is taken as the cut-off point (which is not very different from the average urban growth rate in the country), one would expect about fifty per cent of the towns growing at a faster rate, assuming the distribution to be random or symmetric (normal or any other type of distribution) around the average. Of the total 3245 towns, if 750 towns are excluded as their growth rates during the seventies are not available since they happen to be new or reclassified towns, one would still expect around 1250 towns to experience population growth rates above the national average. The fact that only 555 towns belong to this category suggests that growth is not shared equally or randomly by the cities and towns and there is a pattern in it which is determined by the social and economic system in the country. It was mentioned above that a section of Western scholars believe that the size-distribution of urban centres in large countries must follow a well-defined pattern, generally described as the Rank Size Rule. Recent empirical studies (See Kundu, 1983; Narula 1981) suggest that there are serious distortions in Indian urban structure even if one accepts Rank Size distribution as the norm. It may be seen that, while urban population in India has experienced a five-fold increase during 1901—81—urban population in 1981

being six times that of 1901, the number of urban centres has less than doubled. The Rank Size Rule, on the other hand, postulates that the growth-rate of population in existing urban centres will be the same as the growth-rate of the number of urban centres. Besides, there are significant variations in the growth rates of cities and towns in different size-categories which also goes against one of the corollaries of the Rank Size Rule.

1.5.2 It is indeed true that only 555 towns growing at above the average rate and a substantially larger number growing at a slower pace does not automatically suggest a distortion in the urban system. One can only plead that there are good reasons for an in-depth analysis of the pattern of urban growth, of the spatial distribution of fast and slow-growing towns across the regions, in order to ascertain if there are distortions in the urban system and if there are regions not adequately served by it. This is what has been attempted in the present study.

1.6.1 It would be erroneous to hold that Commission believes the pattern and process of urbanisation in the country to be free from distortions. It, on the other hand, recognises them in no uncertain terms and expresses serious concern about them, and goes on to sponsor a series of studies to understand them. The Commission is concerned about the fact that, in West Bengal, out of the total urban population of 14.4 millions in 1981, 'almost 11 million live in Calcutta and closely interlinked large towns on an east-west axis ranging from Calcutta through Asansol, Bardhaman, Durgapur and Kharagpur. Even here, apart from Calcutta, there is not a single city with a population of half a million or more. The rest of the State, especially North Bengal, consists of villages and towns'. It observes that, in Orissa, while 'the coastal belt has the largest number of towns, the highlands of Central Orissa are almost wholly devoid of urban settlement'. Finally, the Commission notes with anxiety that, in resource-rich regions like Western Orissa, South Bihar and Eastern Madhya Pradesh, only a few urban centres (mining towns) have grown at a fast rate. This, unfortunately, has not led to balanced urban—industrial development in these regions through backward and forward linkages of the mining and quarrying activities.

1.6.2 In view of the above, the confidence vested in the existing 'urban equilibrium' as forming a basis 'for creating a future urban pattern' would appear somewhat misplaced. One must, however, add that the Commission admits that the optimal future urban pattern can be achieved only through 'appropriate policy interventions' by the government. We, therefore, believe that the Commission has an open mind

on the question of existing urban structure providing an ideal basis for future developments and has not accepted the present pattern as well-balanced. We also believe that the Commission has not ruled out from its agenda, recommending major policy intervention by the government to restructure the urban hierarchy and correct the distortions inherited through the colonial period and created subsequently through faulty governmental policies. These assumptions constitute the basic premise for the analysis conducted in this study.

1.6.3 Indeed, the Commission, on the whole, takes a positive and interventionist position regarding the process of urban growth in the country. It actually proposes an urbanisation policy to bring about a 'balanced polycentric settlement pattern with strong regional biases' and this, evidently, would call for a substantial rise in government investment in infrastructure and public amenities, particularly in small and medium towns, and planned control over private investments having a bearing on the process of urbanisation. While one would welcome the positive role of the government as visualised by the Commission, one may wonder as to why it has chosen to be silent on the necessity for increased allocation of resources for this purpose. It only talks of the need for 'positive national intervention' with regard to the four national cities and all metropolitan cities and recommends creation of funds for this purpose. On the other hand, it recognises that 'very limited resources' are available for urban development' but does not comment on its inadequacy. The Commission is extremely critical of the inertia 'of the political and administrative systems' and observes that 'most State Governments and municipal administrations are saddled with obsolete procedures and attitudes' and are 'totally incapable of addressing the rapid urbanisation they face'. It argues that centralised decision-making 'tends to pre-empt initiatives and formulates generalised responses' and, consequently, recommends that Action Orientation Groups and various types of citizens associations must be given major responsibilities in urban development. While the importance of this proposition cannot be discounted, one would have expected the Commission to have said something regarding the role of the government in organising the people's movement, through the provision of training, technology and financial and physical resources. The people's movement cannot be viewed as an alternative to government participation in urban development and should not, therefore, be used as an argument for keeping the share of this sector in the national resources low and diminishing over time. The new relationship between citizens and government cannot be built through ad hoc res-

ponses. This requires careful planning and substantial government support.

1.6.4 It is incorrect to hold that the Commission recommends only passive support on the part of the government to the process of urbanisation, and leaves its direction and pace to be determined by the forces of the market. In fact, it recognises that 'for too long have we been passive about our ability to influence the process of urbanisation and to manage their consequences. We need innovative responses at all levels 'national, state and city'. This is definitely not the voice of despair but a voice of opti-

mism combined with confidence. We would, therefore, like to believe that the Commission has recommended initiative by the people and voluntary agencies, not in an attempt to justify reduction of allocations of financial resources for this sector, or to suggest less government involvement in urban development programmes, but to usher in an era of a new relationship in which governmental agencies would work in greater harmony with the needs and aspirations of the people, supplementing their efforts and resources. It is in this perspective that we have attempted to identify the major areas of intervention by government necessary in the present urban situation.



2

Impact of Colonial Rule on Indian Urban Structure

2.0 The infirmities and inadequacies that got deeply embedded in the Indian urban structure during the colonial period, continue to exert profound influence on the process of urbanisation in contemporary India. It is, therefore, necessary to have an overview of the pattern of urbanisation under the colonial regime, and its socio-economic ramifications, before an analysis of the current situation is attempted.

2.1 The urban centres of pre-colonial India had emerged within the womb of neolithic communities, in response to the process of intersectoral diversification and generation of agricultural surplus. With the growth of several handicraft industries and supporting tertiary activities, a large number of urban centres had emerged, well distributed in geographical space. The urban segment had, thus, occupied an important position in the settlement hierarchy during the ancient and medieval periods. There were, for example, 3200 towns (qasbas) and 120 cities (shahars) in India in 1586.¹ The proportion of urban to total population was, however, noted to be lower at the end of the nineteenth century than at the end of the seventeenth century.² It may thus be argued that the historically determined process of urbanisation, associated with the expansion of industrial and trading activities, was totally disrupted during the colonial period.

2.2 The colonial economy in India was characterised by the breaking-up of the symbiotic links between agriculture and household industry. Although traditional industry was liquidated, or forced into a condition of decaying stagnation, along the entire spectrum of settlements, the villages and the small

towns had to bear the brunt of it. The rural economy had also to provide refuge to a section of unemployed artisans from the cities and towns and, as a consequence, its dependence on the primary sector increased substantially.

2.3 The dominance—dependence relationship between the British and the Indian economy destroyed the indigenous production base of the urban centres and disrupted the geographical specialisation they had achieved through the historical past. The transformation of the local economy into a market for the manufactures of and a source of raw material for British industries hit hard at the industrial and commercial base of a large number of towns and cities in the country.³ Most of the urban centres thus became economically sterile, with a constricted modern industrial sector, a few traditional handicraft activities and a bloated tertiary sector.⁴ Several traditional industrial and commercial centres thus declined throughout the country. The damage to the weaving industry was felt ubiquitously, as this constituted an important segment of the industrial base in most of the pre-colonial towns.⁵ An increasing proportion of land was brought under cultivation of cash crops, largely for export. This, accompanied by the investment and revenue collection policies of the government, brought about significant changes in agrarian relations, resulting in a decline in food production. Famines, thus, became very frequent during the colonial period. Export of food, even in periods of scarcity, aggravated famine situations that took a heavy toll of life, both in rural and urban areas. All these factors kept the pace of urbanisation low during the colonial period.

¹ *Tuhfat-i-Akbari* 3:545-46. Quoted in Haheeb (1979).

² Habib (1963), quoted in Haheeb (1979).

³ *The Gazetteer of India*, vol. 2 (p. 615), Ministry of Education and Social Welfare, 1973.

⁴ Raza, Haheeb, Kundu and Agarwal (1981).

⁵ Dutt and Sundharam (1973).

2.4 The interdependencies among regions and sub-regions within the country weakened considerably and the spatial system responded to a new pattern of colonial integration.⁶ The crucial agents of this process of integration were the demands of foreign trade and the appropriation of economic surplus. Foreign trade sought new channels and, as a result, traditional trade routes and medieval inter-settlement linkages got replaced by a system that focused on a few large port towns. These towns became the foci of the suction mechanism which led to enormous demographic expansion in the former accompanied by a process of economic decay in smaller towns and destruction of inter-settlement linkages in the hinterland.

2.5 The imposition of modern industries in a few large cities by the middle of the nineteenth century drastically changed the nature of the space economy. These industries were basically units for processing raw materials for export and producing select consumer goods for the local elites, residing mostly within the port enclaves.⁷ The centrifugal network of transport and communication helped in strengthening the economic links of the port hinterlands with the external economies and in weakening intra-regional inter-dependencies. The movement of population from the rural or urban areas, to these port towns, was not in response to a vertical shift of population from the primary to the secondary sector but was largely in the form of outmigration of 'disguised unemployed' from an indigent hinterland who, on arrival in the towns, shuttled among different informal occupations and comprised what has been described as the 'floating population'.

2.6 It is indeed true that, with the establishment of an elaborate spatial structure for administration, with a number of provincial, district and taluka headquarters, cantonments, civil lines, railway colonies etc., the urban system in India got substantial infra-structural support. The British must also be given the credit for setting up a number of hill stations.⁸ All this, unfortunately, could not change the basic urban structure in the country, dominated by the port cities of Calcutta, Bombay and Madras. Particularly, the erstwhile princely states remained virtually untouched by this process of urbanisation.

2.7 The requirements of imperialist exploitation thwarted economic development by not permitting the

emergence of a self-reliant industrial sector. In most of the towns, the decay and/or destruction of traditional industry was significant. The symbiotic relationship between a large number of handicraft-, service- and commerce-based towns and their hinterlands of primary production was disrupted and the former were either allowed to die out or were brought within the ambit of the suction mechanism, as centres of collection and primary processing. Instead of serving as nodes from where impulses of growth could be induced to the periphery, they, by and large, performed a satellitic role vis-a-vis the ports, that were themselves satellitic to the metropolitan economy.

2.8 The few large cities that came up at the apex of the regional urban system did not emerge from the hierarchy of settlements but were imposed on them from outside and, therefore, grew at the cost of the latter. They drew people from rural unemployment to urban underemployment and unemployment, resulting in denudation of the hinterland of its vigorous and enterprising elements. These cities played only a limited role in ushering in modernisation as they stood as 'gateways of the western culture' and could not bring about cultural change conducive to economic development in the cities or their hinterland.

2.9 The sectoral structure of the workforce in the urban centres got distorted with the growing incidence of 'non-productive' activities during the late nineteenth and early twentieth century. The secondary sector was very small to begin with and was substantially diminished as a direct consequence of the strategy of limited industrialisation followed during that period.⁹ A large primary sector persisted in most of the towns and cities-while the tertiary sector expanded effortlessly. The elementary processing activities that directly used the products of the primary sector or produced consumer goods requiring a low level of skills, dominated the urban economic base. This was in total contrast to the pattern of development in the contemporary cities of the Western world.

2.10 The economy of the urban centres was significantly affected by this process of deindustrialisation during the colonial period.¹⁰ The phases of industrial stagnation that had occasionally punctuated the evolution of Victorian cities, became a way of life in the contemporary cities of India. Besides, the nature of the industries in these cities was such that

⁶ See Lewis (1973).

⁷ See Kundu and Ritzl (1982).

⁸ Mitchell (1973), quoted in Raj Bala (1986).

⁹ Alam (1978).

¹⁰ See Bagchi (1976) and Gadgil (1944).

they could not create productive jobs in other sectors through multiplier effects and thereby transform the urban economy. Service-based handicrafts that met the daily needs of the urban population and provided a limited array of luxury goods comprised the core of urban industries. The growth of even these industries was marked by high fluctuation and, as a consequence, not many cities exhibited a tendency towards industrial specialisation during the colonial period. Thus, excepting the few that claimed a major share in British industrial investment, most of the towns and cities in India had pre-industrial characteristics.

2.11 The adverse government policies and lack of state patronage were responsible for Indian industries not keeping pace with those in western countries in terms of the technology of production.¹¹ The industrial scene in the late nineteenth and early twentieth century was, thus, marked by a low level of technology and high labour intensity. The British-owned industries that were generally operating at a large scale and producing mostly for export were the main consumers of electricity. Other industries, however, exhibited a low proportion of mechanised to non-mechanised units and many among the industrial raw material or food processing establishments were operated by draught animals. As the demand pattern of the urban consumers was changing in favour of imported goods, low-technology-based indigenous industries were finding it increasingly difficult to survive in the market. Whatever industrial growth occurred was restricted to the large cities, and that too was due to the emergence of small-scale units and not the expansion in the existing large establishments owned by local entrepreneurs.

2.12 Deindustrialisation in the colonial cities was accompanied by a rapid expansion of tertiary activities. The latter, unfortunately, was not a manifestation of the maturity of the economy as was the case of the cities in the Western capitalist world at that time. It was, on the other hand, a manifestation of a low level of economic development and stagnation. The process of tertiarisation was corollary to the pro-

cess of marginalisation of the urban economy. The growth of the tertiary sector occurred basically in terms of personal services, where the wage rate was extremely low. Domestic servants, artisans and rickshaw pullers constituted the dominant component of this sector. Growth of employment in professional and technical services was negligible. The business sector comprised largely hawkers, petty traders, money-lenders etc. Modern financial or banking institutions had developed only in a few cities and operated at a low scale. Technical, professional, medical and educational services (excepting religious services) were poorly developed and employed only a few. Trade, a major employer of labour, was unorganised and factionalised, unspecified trade accounting for a large proportion of the workforce in this category. Transport was non-mechanised and, therefore, employed a large number of male workers at a very low wage rate. The other dominant category in the urban workforce structure was 'general labour', a term often used by the population census to designate unspecified workers. This category, understandably, had a high component of disguised employment. Rentiers, particularly absentee landlords, also comprised a sizeable category. Many of these cities had an established prostitution trade.

2.13 It is, thus, obvious that the growth of most of the tertiary activities in the cities was determined not by demand but by supply factors. *The logic of their growth was labour undercutting the wage rate. The swelling urban labour-force created employment for itself by making obsolete technologies viable by reducing the labour cost, by dividing one job into many, by catering to transient and sometimes low-priority demands.* The source of the labour supply in the cities was not only natural increase or rural-urban migration, but also displaced workers from tottering traditional industries. *The expansion of low-income, informal employment, both in industrial and tertiary sectors, has continued to be the major factor responsible for demographic growth even in the post-colonial cities, as we shall see in the following chapters of this study.*

¹¹The analysis in this and the following section (2.12) draws heavily from the paper of Raza, Haheeb, Kundu and Agarwal (1981).

3

Urbanisation Since Independence—A Regional and Size-Classwise Analysis

3.1 *The Seventies—A Distinctive Decade*

3.1.1 India has experienced a very fast growth rate of urban population in the last census decade (1971—81), a rate significantly above that of any other decade in the present century. Urban population has moved up from 109 million to about 160 million during 1971—81, giving an annual growth rate of about 3.9 per cent. A somewhat comparable growth rate was recorded in the fifties, 3.5 per cent per year, but this was dismissed by the demographers as due to the adoption of a loose definition of 'urban place' in the 1951 census, the first conducted after independence.¹ No one has, however, questioned the proposition that the pace of urbanisation in the seventies has been very fast. It is, therefore, important that the patterns of urban growth across regions and across different size-classes of settlements are analysed carefully and the factors responsible for them properly identified.

3.1.2 It must be mentioned that the significant acceleration in urban growth during the seventies is not solely due to faster growth of population in existing urban centres. There has been a significant addition of over seven hundred in the number of towns during seventies according to the 1981 census (see Table I). The census of 1951 too had reported a significant increase in the number of towns (by about six hundred), but this has been attributed to definitional discrepancies, as noted above. The definitional factors may still be important in explaining a part of the increase in the number of towns in the case of Uttar Pradesh, as several of the Town Area Committees that were declassified in 1961 and 1971 (due to non-inclusion of this local body in the list of the local bodies that automatically make a settlement a census town, as per the notification of

the Registrar General) have regained their urban status in 1981. However, much of the increase in the number of towns, as also the rapid growth of population in the existing urban centres, in recent decades must be attributed to the development dynamics in the country. Excluding the new towns, the urban growth for the seventies has been recomputed to be 3.2 per cent, which is also higher than the corresponding figures for all previous decades in the present century.²

3.1.3 There is yet another significant change that the seventies has witnessed so far as the macro-economic scenario in the country is concerned. The dependence of workforce on agriculture and allied activities has diminished in this decade. Taking the distribution of only male workers in the nine census categories (female workforce being more vulnerable to the definitional changes in the population censuses), one would see that the percentage of workers engaged in agriculture (as cultivators and agricultural labourers) has gone down from 67.4 to 63.5 during 1971—81, the figure for 1981 being lower than that of any other census year in this century. It is, indeed, true that the dependence on agriculture had increased marginally during 1961—71 due to an absence of sectoral diversification and stagnation in the industrial sector since the mid-sixties. The figure for 1981 is, however, lower than that of 1961, the latter being only 64.7 per cent. Different rounds of the National Sample Survey, too, suggest a decline in the share of agriculture in the workforce. In rural areas, the percentage of male workers engaged in agriculture, hunting, forestry and fishing has declined from 83.2 per cent in 1972/73 (27th Round) to 80.62 per cent in 1977/78 (32nd Round) and further to 76.80 per cent in 1983 (38th Round). The corresponding figures for the

¹ The high urban growth recorded by the 1951 census has also been explained in terms of massive displacement of population due to partition of the country in 1947 and absorption of a substantial proportion of migrant population in large urban centres.

² Planning Commission (1984).

urban areas are 10.71, 10.57 and 10.25. All these reflect a trend towards sectoral diversification in the economy.

3.1.4 In the light of these changes at the macro-level, it would be worthwhile to examine the spatial pattern of urban growth and differential growth of urban centres in different size-categories and see how these relate to changes in the sectoral structure of the economy at regional and sub-regional levels.

3.2 *Inter-state Variation in the Pattern of Urbanisation*

3.2.1 The pattern of urban growth in different states and regions of India gives interesting insights into the process of urbanisation and its socio-economic correlates. The fastest urban growth during the fifties was recorded by Assam, Orissa and Madhya Pradesh. The three states retained their positions by registering phenomenal urban growth in the subsequent decade as well (See Tables II, III and IV). Orissa and Madhya Pradesh exhibited high rates of urban growth during 1971—81 also (Assam unfortunately was not covered in 1981 by the Census Operations) together with Haryana and Karnataka. Uttar Pradesh, yet another less-developed state, has made a significant departure from its past trend (its urban as well as total population growth rates being less than those of the country in every decade in the present century until 1971) and recorded the fastest urban growth among the states during 1971—81. The case of Haryana and Karnataka can be attributed to their rapid industrial growth which is reflected in their substantial increase in employment in the non-agricultural sectors. The other two states registering medium rates of urban growth during 1961—81 (higher than the national average in the sixties but lower than that in the seventies) are Gujarat and Maharashtra, the relatively developed states. It may be noted that Haryana, Gujarat, Maharashtra and West Bengal are the four advanced states where the work participation rate for males has increased marginally. However, in all the poorer states, the male participation rate has declined. One would, therefore, hypothesise that, in the developed states, the growth of employment is large enough to compensate for the decline in the workforce due to withdrawal of aged and child population, consequent on economic development. And yet, this growth in employment opportunities has not resulted in fast urban growth in these states. The less-developed states, on the other hand, are not so fortunate as to have a rise in the work participation rates but are experiencing high urban growth, possibly due to push factors operating in the rural areas. The fact

that the male participation rate in urban areas of these States declined during the sixties, as also the seventies, much more than can possibly be explained in terms of definitional changes, strengthens the 'push factor' hypothesis. Also, it is important to note that, in the industrially developed states like Maharashtra, Tamil Nadu and West Bengal (with the exception of Karnataka and Haryana), urban growth rates have been less than the national average during the seventies.

The respective urban male participation rates of Bihar, Rajasthan, Madhya Pradesh, Uttar Pradesh and Orissa in 1981 are significantly below the all-India figure. The National Sample Survey, which is considered to be a better source for employment statistics, sheds further light on this aspect. The rate of unemployment by current daily status for urban males increased from 4.76 per cent in 1972/73 (27th Round) to 5.35 per cent in 1977/78 (32nd Round) and to 5.45 per cent in 1983 (38th Round). By weekly status, it increased from 3.53 per cent to 4.04 per cent during this period. Moreover, in the poorer states, viz. Orissa, Madhya Pradesh and Uttar Pradesh, the urban male unemployment rates, both by weekly as well as daily status, have shown a monotonous rising trend. *All these put together would seriously question the thesis that a spurt in urban jobs has attracted a massive number of workers into the urban areas during the seventies and early eighties.*

3.2.2 It is worth while to note that, in the majority of the less developed states, the high urban growth rate has been associated with a high growth rate of population in the towns belonging to the fifth and the sixth order size categories, with population below ten thousand. In Bihar, Orissa, Rajasthan, Uttar Pradesh and Madhya Pradesh, the growth rates of towns in these bottom two size-categories in the seventies are higher than that of most of the other states and there has been a significant acceleration in these rates over the previous decade. This is a phenomenon that merits an in-depth empirical investigation. It is unlikely that the growth of these towns has been supported by a rapid economic growth or a widespread dispersal of industrial activities in these states. At least, there is no such indication of industrial dispersal at the macro-level. On the other hand, it is observed that the small towns in these states have a predominantly rural economic base, a substantial segment of its workforce being in agriculture. It would also be difficult to substantiate the proposition that fast growth of agriculture has lent support to the demographic expansion in these settlements. One can

possibly attribute this phenomenon to striking poverty, falling agricultural productivity, increasing population density in the rural areas and marginal investment in infrastructure and public amenities, particularly at the district and taluka headquarters.

3.2.3 It would be interesting to mention here the results of a preliminary exploration made in 1984 in connection with a research study by the National Institute of Urban Affairs for providing inputs in the preparation of the urban development strategy for the Seventh Five Year Plan. The study had identified trends of urbanisation and their socio-economic correlates in different regions for a detailed empirical investigation. A tentative identification of four non-metropolitan *study areas* was made. These were : (i) the agriculturally advanced belt of Punjab, Haryana and Western Uttar Pradesh, (ii) the agriculturally backward region of Southern Uttar Pradesh and Northern Bihar, (iii) the industrially developed region of Western Maharashtra, and (iv) the mining and industrially developed region of Southern Madhya Pradesh. TABLE V presents some of the relevant social and demographic characteristics of these regions.

Study Area I, comprising six districts of Punjab, Haryana and Western Uttar Pradesh is at a fairly high level of economic development and has a high percentage of urban population. The second region, with two districts from Eastern Uttar Pradesh and four from Bihar is one of the most backward in the country, with less than seven per cent of its population living in urban areas in 1981. The third region is the most developed among those under study and has the highest percentage of urban population. The fourth region comprises four districts of Madhya Pradesh located in the mineral-rich south-eastern region of the state, wherein a massive public sector investment has been made in recent years. The region has a reasonably high level of urbanisation (in 1981) and shows a great deal of developmental potential.

It is important to note that the highest rate of urban growth during the seventies was recorded not by the industrially developed region of Maharashtra or the dynamic region of Madhya Pradesh but by the backward group of districts in Uttar Pradesh and Bihar (Study Area II). The growth rate, viz. 75.82 per cent in a decade for this region is indeed very alarming. The next highest growth rate is recorded in the south-eastern region of Madhya Pradesh (Study Area IV) which is still very under-developed compared to other parts of the country and also other parts of the state. The population growth in the rural areas of Study Areas II and IV

during 1971—81 has been very low—significantly below the natural growth rate of rural population, which reveals their out-migrating character. One can argue that, despite the fast urban development in these two regions, particularly in Study Area IV, the rural segments have not got a share developmental activities adequate to attract or even retain their share of the local population. The fast growth in urban population in Study Area II can be attributed to the extremely high density of population in the rural areas of the region. This supports the hypothesis that it is pressure of population on land and declining labour productivity that have been the major factors behind rural-urban migration. The agriculturally developed region of north-western India (Study Area I) has a reasonably high growth rate of rural as well as urban population. However, among the four regions, its urban growth rate is the lowest. One would also observe that the density of population in the rural areas of this region is reasonably high, suggesting that local population gets meaningfully absorbed in the region and 'push factors' do not seem to be very strong.

3.3 Variation in Urban Growth within the States

3.3.0 Urban growth within the states reveals an interesting spatial pattern. It was noted above that the backward states, in general, have recorded very high growth in their urban population in recent decades. To ascertain if the urban growth within the backward states exhibits a similar pattern, the cases of Uttar Pradesh, Orissa, Andhra Pradesh, Rajasthan and Madhya Pradesh have been analysed in the following subsections in some detail.

3.3.1 The backward districts in the State of Uttar Pradesh recorded exceptionally high urban growth rates during the seventies. The districts where urban population grew by over or about a hundred per cent are Uttar Kashi, Chamoli, Tehri Garhwal, Pithoragarh, Muzaffarnagar, Badaun, Fatehpur, Hamirpur, Kheri, Unnao, Rai Bareilly, Sultanpur, Pratapgarh, Basti, Deoria, Azamgarh, Ballia and Gazipur. Interestingly, all these, excepting Muzaffarnagar, have a percentage of urban population significantly below the state average and engaged a very low proportion of workers in the secondary sector in 1971 and 1981. The districts with large class I cities like Kanpur, Lucknow, Varanasi, Agra, Allahabad, on the other hand have registered very low growth-rates of urban population. It would be inappropriate to dismiss the high urban growth in the backward districts as a statistical phenomenon by attributing it to their low urban population in the base year. It should be noted that it is difficult to bring about a given urban (population) expansion in

a region when its urban base is low, as the process of urbanisation generally works (attracts migrants etc.) through the urban population base. One can, thus, read a negative and significant correlation between level of urbanisation and urban growth.

It may be seen that agglomeration without dispersal in Uttar Pradesh has led to enclavisation in the cities like Kanpur, Lucknow and Varanasi. The districts around these (excepting the districts of locations of these three cities), viz. Unnao, Hardoi, Fatehpur, Jalaun, Etawah, Banda, Bara Banki, Sitapur, Gazipur, Jaunpur etc. report extremely low proportion of workers outside agriculture. The process of development does not seem to have benefited the hinterland of the large cities in the recent census decade as the percentage of workers engaged in non-agricultural activities remained generally static in these districts, despite a fall of over three percentage points at the state level. The marginality of the impact of large cities on their peripheral areas may also be inferred from the fact that the shift of workers from agriculture to other sectors is very low in the districts of Kanpur, Lucknow, Allahabad, Agra etc. This may be due to certain diseconomies of scale and governmental policies discouraging further spatial concentration of large and medium-scale industries. The implementation of city Master Plans, too, might be hindering the growth of formal industrial activities within the cities and their immediate hinterland. Even the districts with second-order class I cities like Jhansi, Mathura, Aligarh and Moradabad show modest urban growth—much less than the average growth rate of the state.

While class I cities have experienced modest population growth, the towns with less than twenty thousand population, belonging to the class IV, V and VI categories, have grown very fast in Uttar Pradesh, as in several other backward states. The towns in the latter categories have grown at much faster rates than their counterparts in the developed states. More importantly, there has been an acceleration in their growth in the seventies compared to the previous decade. The proportion of towns reporting a growth rate of above fifty per cent is very low among the class I towns (with population over one lakh) and class II towns (with population between 50,000 and 1,00,000) in the state compared to the other states. This, however, is not the case for towns in the lower categories. Among the 80 towns belonging to the class III size-category in 1971 (with population between 20 and 50 thousand), 62 have recorded growth rates of above fifty per cent during 1971—81, while the total number of

such fast-growing towns is only 66. Only three other class I towns and one class II town have registered this high population growth rate. Interestingly, while the urban growth rate in Uttar Pradesh was 4.9 per cent during 1971—81—much higher than the national growth rate of 3.8 per cent—the growth-rate, computed after excluding the towns below 20 thousand population, is lower in the state compared to the country as a whole, the two figures being 3.10 and 3.55 per cent respectively. The fast growth of small and medium towns in a near stagnant economy like that of Uttar Pradesh calls for an in-depth empirical investigation based on micro-level data. It seems difficult to argue that the growth of small and medium towns in the state is supported by widespread dispersal of industrial activities, brought about through governmental programmes. One can hypothesise the poverty-induced out-migration from low-productivity agriculture and other primary sectors is responsible for the population acceleration at the lower rungs of urban hierarchy.

3.3.2 In Orissa, the backward districts of Keonjhar, Mayurbhang, Balasore, Dhenkanal, Boudh, Khandmals, Bolangir and Koraput have exhibited a fast rate of urban growth during sixties and seventies. This growth has occurred both through the emergence of new towns as also due to fast growth of existing small towns. A significant negative relationship has been observed between urban growth and level of urbanisation viz. percentage of urban to total population, based on the district level data. Urban growth relates negatively also with several other indicators of industrial and agricultural development. In contrast to the fast growth of small towns in the backward districts, urban growth in relatively developed districts is determined by the growth of the large cities, the small towns here registering very low growth rates. This has been responsible for further, urban industrial concentration in the large cities within the developed districts.

3.3.3 Telengana, the least urbanised and economically least developed region of Andhra Pradesh has recorded the fastest growth in urban population in the recent decade. The districts of Medak, Nalagonda and Karimnagar with 8.5, 6.7 and 10.7 per cent population in urban areas in 1971 have recorded phenomenal urban growth of 73, 113 and 82 per cent respectively during 1971—81. The other district of Telengana viz. Nizamabad, Adilabad, Warangal and Khammam (excepting Hyderabad and Rangareddy) too have percentage of urban population much below the state average of 19.3 per cent. All of these have registered urban growth much higher than

the state. It is also important that the small towns in the backward districts mentioned above have exhibited higher growth rates than their counterparts in the relatively developed districts.

3.3.4 In Rajasthan, the relatively urbanised districts of Bikaner, Ajmer, Churu, Jodhpur, Jaipur and Kota experienced rapid urbanisation during the fifties. The pattern changed drastically in the subsequent decades. The districts that showed very high growth-rates of urban population during the sixties and seventies, are Jalor, Banswara, Dungarpur, Pali, Barmer and Jhalawar that had low urban base. Although the developed districts like Jaipur, Bikaner, Udaipur and Kota maintained growth rates similar to that of the state as a whole, the correlation coefficient between percentage of urban population and urban growth works out to be negative and significant both in the sixties and seventies.

3.3.5 Madhya Pradesh exhibits a similar pattern of intrastate variation in urban growth. The districts with relatively developed urban industrial base have exhibited low or modest rates of urbanisation during the seventies. The cases of Gwalior, Indore, Jabalpur, Ujjain, Ratlam, Sagar and Mandsaur may be quoted as examples. Backward districts like Bhind, Tikamgarh, Rewa, Sidhi, Raisen and Betul, on the other hand, have registered urban growth of over one hundred per cent. The urban growth rates for most of the other backward districts are between sixty and a hundred per cent.

3.3.6 Relatively developed states like Gujarat, Maharashtra, West Bengal and Tamil Nadu exhibit a different pattern. First, the inter-district variation in urban growth is not as high as noted in the case of the backward states. Second, urban growth in the relatively urbanised districts, with one or more class I towns, are quite high, which reflects further concentration or a limited dispersal of industrial activities around the large cities within the district. A few of the backward districts do show high rates of urban industrial growth, but this can be explained either in terms of their proximity to a large city or major governmental programmes or projects. In Gujarat, for example, relatively developed districts of Gandhinagar (adjacent to Ahmedabad), Surat and Vadodara exhibit the highest rates of urban growth. In Maharashtra, the fast urbanising districts are Thane (next to Bombay), Pune, Aurangabad and Chandrapur, the first two falling in the industrial region of the state and the case of the other two being explained in terms of major government investments. Twenty-four Parganas, Nadia and Bardhaman in West Bengal are urbanising very fast, largely due to limited industrial

dispersal around the Calcutta and Asansol urban agglomerations. The urban growth in Jalpaiguri, Darjeeling and West Dinajpur, on the other hand, can be explained in terms of major governmental programmes. Tamil Nadu shows the least inter-district variations in urban growth among the major states, the only fast-urbanising district being Chengalpattu, comprising a part of the Madras urban agglomeration and the neighbouring territory. The other districts experiencing medium urban growth are Periyar, North Arcot and Dharampuri that fall in the hinterland of the cities of Erode, Vellore and Bangalore respectively.

It may, thus, be argued that urbanisation in the developed states has been largely confined to the class I cities and their peripheries, which reflects a process of industrial concentration and, sometimes, limited industrial dispersal. As opposed to this pattern, district and taluka headquarters, along with a small number of market towns, have played a major role in urbanisation in the backward states. They have attracted workforce from weakening agriculture and tottering traditional industries in their hinterland, resulting in fast urban growth in the relatively backward districts of these states.

3.4 Regional Variation in Growth Pattern of Cities and Towns in Different Size Categories

3.4.0 A careful analysis of growth of urban centres in various size-classes and in different regions would help in clearing much of the confusion that exists in urban literature pertaining the size and growth debate. Assertions have been made regarding the phenomenal growth of class I urban centres (with population above 100 thousand), (henceforth called cities) together with stagnation of middle-order towns and decline in the population base of small towns. This can be largely attributed to methodological flaws in the presentation or usage of the population census data.

3.4.1 It has been argued by Jain (1977), Kundu and Raza (1982), Rakesh Mohan and Pant (1982), and rightly too, that the computation of urban growth for different size-categories on the basis of the population of the urban centres belonging to these categories in the respective census years has raised a false alarm. Jain, Rakesh Mohan and Pant have computed the growth for different categories of towns by taking the population at the two census points only for those towns that belonged to that category in the base year (while Kundu and Raza took the terminal year classification as the basis for recomputation of the growth rates). It is, however, important to note that, in computing the rates, they excluded the declassified towns from both the time-points. This may give an upward bias to the growth estimates for the

lower categories of towns for which the number of declassified towns is likely to be large.

3.4.2 To get a realistic picture of the growth rates of urban centres by size categories, it is undoubtedly necessary to recalculate the growth rates given in the General Population Tables of the Population Census. The new estimates must be obtained by keeping the towns in each category the same as in the base year. For 1961—71, the 1961 town-size classification can constitute the basis. For 1971—81, however, the 1971 size classification should be taken as the basis. Besides, it ought to be ensured that no declassified town is excluded from the analysis and that the (rural) population figures of all such towns are added to the terminal year population while computing the growth rates. The growth rates of population of towns in various size-categories during 1961—71 and 1971—81, as computed by this method, are given in TABLES II and III. It is important to mention here that the two studies mentioned above, while trying to correct the census estimates of the growth-rates of population in different size-categories of urban centres, have attempted to do so through retabulation of population data for individual towns on the basis of their base-year classification. The present study, on the other hand, recalculates the growth rates using the aggregative tabulation of the census, viz. statements 5 and 6 of the General Population Tables (1961) and the statements 5 and 7 (Table A-IV) of the General Population Tables (1971), and, consequently, the probability of computational and other error is minimal.

3.4.3 The following generalisations may be attempted on the basis of TABLES II and III. *One*, taking India as a whole (excluding the smaller states, union territories and Assam, for which 1981 census data are not available), it is noted that the growth-rates during 1971—81 are higher than those of the preceding decade for all the categories of urban settlements. The acceleration in the growth-rate is the highest in the case of cities with population between one and five lakhs. These cities have registered a very high growth rate during the sixties and seventies, the rate being significantly higher than that for all other categories in the seventies. *Two*, the million plus cities were the fastest growing centres in the sixties, their growth-rates slowing down in the subsequent decade. In fact, the decadal increase of population in these cities during 1971—81 would be as low as 35 per cent if Bangalore and Delhi, whose high growth is largely due to massive area expansion, are taken out of the category. *Three*, the growth-rate of the cities (above one lakh population) works out to be higher than that of the other five census categories of towns in both

the decades under consideration. *Four*, in most of the states, the cities in the category of one to five lakhs have registered the highest growth during the sixties and seventies, the growth rate being particularly high in the relatively developed states. *Finally*, there is no evidence to suggest that the towns ranging between twenty thousand to one lakh population are languishing over time. In fact, they are growing quite rapidly, barring in a few pockets, at a rate which is twice that of the Indian rural population.

3.4.4 The discussion on the dynamics of growth so far has been based on the index of 'simple growth' which implicitly assumes the increase in town/city population to be a linear homogeneous function of the base year (previous census year) population. One may wonder whether the spatial pattern emerging from the analysis would, in any way, be different if other measures of growth-rate that assume annual or continuous adjustment in the population base are used in analysing the growth pattern. It must be mentioned that, although cardinal values and the ratio of the growth rates of the towns would change with the use of an alternative index, viz. compound or exponential growth-rate, as mentioned above, the ranking of the towns (by their growth-rates) would remain unaltered, and hence one may argue that the discussion in the previous section would remain valid.

As opposed to the assumption behind all the urban growth indices mentioned above, one can postulate that the dynamics of development in towns/cities operate not through their population but their area base. This would require increases in urban population to be related to urban land. Based on this analytical premise, one can define the index of urban growth as follows :

$$g = \frac{X_2 - X_1}{(A_1 + A_2)/2}$$

where X_2 and X_1 are the populations of the urban centres or districts under consideration in the terminal and base (census) years, while A_2 and A_1 are the corresponding area figures. When one is thinking in terms of providing residential and working space, economic and other infrastructure, public utilities etc. to a growing urban population, it is important that our understanding of urban growth takes cognisance of the space problem—the problem of congestion on urban land. The study by Kundu and Raza (1982) has computed urban growth-rates using the above formulation for the cities and other urban centres, taking the National Sample Survey regions as the basic geographical units, which brings out the

difference in urban growth in different size-classes and different regions very sharply. Whereas the cities grew at the rate of 1,556 persons per square kilometre on an average, the corresponding figure for the towns was as low as 358. The spatial variation, too, is quite alarming. The city growth rate was the highest for the Coastal Maharashtra Region (having Greater Bombay MC) followed by Delhi, the two figures being 2,994 and 2,885 persons per square kilometre, respectively. The lowest figure was recorded in case of western West Bengal which was only 419.

It is important that the notion of pace of urbanisation is related to the critical factors in planning and the fact that a small number of already over-crowded cities are getting a substantial increase in the number of persons in every square-metre of the area every year must figure importantly in discussions on urban growth.

3.5 Variation in Growth Rates within the Size Categories

The discussion on the spatial structure of urbanisation in the previous sections takes the states, National Sample Survey (NSS) regions or districts as the basic units of analysis and, consequently, the growth-rates are computed by aggregating the population of towns in different size-classes, considering only those towns that belonged to the class in the base year. As the size of the settlements vary widely within a category, it is possible to argue that the growth estimates, as obtained in the previous sections, exhibit higher sensitivity to the growth-rates of larger than of smaller towns. In an attempt to understand the dynamics of growth within a size-group of towns, one may want to understand the average situation for the towns in a region and use an averaging method that considers each town as of equal importance, irrespective of its size. TABLE VI presents the simple arithmetic average of the growth rates of the town falling in the various size categories in the base year. It must be noted that this average will be larger than the weighted average as given in TABLES II and III, when larger towns/cities within the category are growing at a relatively slower rate and vice versa. TABLE VI confirms the pattern noted on the basis of TABLES II and III.

The intra-class variation in growth-rates has been articulated through the standard deviation (see TABLE VII). The disparity is, generally, of a much higher order for the sixties than for the seventies, for smaller towns than for large towns. It is also important to note that, in case of Class I towns (cities), the disparity has gone down over time, which cannot be said about urban settlements in lower categories. Excepting Bihar, for which the inter-city variation re-

mained more or less constant, the figure registered a significant decline in all states. The cities of West Bengal, Tamil Nadu, Rajasthan, Punjab, Maharashtra, Kerala, Karnataka, Gujarat and Andhra Pradesh show a very low standard deviation in their growth-rates during 1971—81, all the figures being less than 20. One would also observe that, while the average growth-rate for the cities has gone up successively in the past three decades, this is primarily due to the high growth-rate and its acceleration in case of the cities at the lower end, viz. with population between one to five lakhs. *The cities, thus, are doing well not merely in terms of their average growth performance but also in reducing their cross-sectional variation, which may be considered as evidence of temporal stability in the economic base of the cities.* The towns at the middle-order of the urban hierarchy, too, have improved their average growth-rates but the variation continues to be significant, while in the lowest-two size-categories, the disparity in the growth rates has gone up in the seventies. *From this, one may argue that the economic base of small towns in India is weak and volatile, which results in significant fluctuations in their population growth-rates over time.*

3.6 Spatial Distribution of Fast-growing and Stagnating Urban Centres

3.6.1 The present section analyses the regional distribution of the towns, growing fast and growing slowly during 1961—81. Considering a growth-rate of fifty per cent in a decade to be reasonably high for a city or town, the number and percentage of the centres growing at a higher rate to the total number of centres in each size category (in the base year), has been calculated for select states during 1961—71 and 1971—81 (see TABLES VIII, IX and X). Maps I and II reveal the spatial variation in the incidence of fast-growing settlements in the two decades. Barring Northern Uttar Pradesh, Western Rajasthan, the dry areas of Maharashtra and Karnataka, and the agriculturally underdeveloped Telengana region of Andhra Pradesh, all other parts of the country had towns growing at a fast rate during 1961—71. The concentration of these settlements, however, seems to be in the corridors along the Jalandhar-Delhi-Mathura, Ahmedabad-Bombay-Ahmednagar and Madras-Coimbatore lines. Incidentally, there is a high concentration of slow-growing and stagnating towns, where population growth is less than ten per cent in a decade, in Punjab and Kerala in the neighbourhood of the fast-growing cities/towns (see TABLES XI, XII and XIII and Maps III and IV) which suggests a process of readjustment of the economic base within the region, as some towns seem to be growing at the cost of the others. Bihar, Rajasthan and Karnataka are

the three other states that had a large number of slow-growing towns during the sixties.

3.6.2 The distributional pattern of fast-growing cities/towns in space during 1971—81 happens to be significantly different from that of the previous decade. The number as well as the spatial spread of fast-growing urban centres increased during the period. Excluding parts of Western Rajasthan, North-eastern Maharashtra and Northern Uttar Pradesh, all regions seem to have had a good number of fast-growing urban settlements. One must, however, add that the number of these fast growing cities/towns in Kerala and Tamil Nadu declined significantly during the seventies, which slowed down their overall rates of urbanisation. The two states also claim a large share in the number of slow-growing towns. The explanation for this can be sought in the agricultural stagnation and inadequate industrial expansion in these states.

It is interesting that, along the Jalandhar-Delhi and the Ahmedabad-Bombay corridors, fast-growing cities and towns co-existed with the stagnating towns, even during the seventies. This substantiates the inference that economic readjustment and redistribution of population among the urban settlements took place in certain regions, as mentioned above. The high incidence of fast-growing small towns in Bihar, Madhya Pradesh, Eastern Uttar Pradesh, and the central region including parts of Maharashtra and Madhya Pradesh, can perhaps be explained in terms of poverty-induced migration from rural to urban areas.

The percentage distribution of fast-growing and slow-growing towns across various size-classes of urban settlements gives further insights. The incidence of fast-growing towns goes down as one moves from higher to lower-order size-categories. The size-class distribution of stagnating towns, however, is just the opposite. These suggest that there is a distinct relationship between the size category and the growth pattern of the urban centres. In the case of some of the underdeveloped states, however, the percentage of fast-growing towns in the bottom two size-categories is relatively high. It is also important to note that, while the percentage of fast-growing towns went up in all the size-categories, the increase in the case of the cities (class I towns) is relatively high. Similarly, the decline in the percentage of stagnating settlements is considerably large in the case of the cities and class II towns, compared with that of the other categories. These suggests the existence of a dual pattern of urban growth in India which is getting strengthened over time.

The percentage of fast-growing towns in class V and class VI categories happened to be extremely high in the underdeveloped states of Bihar, Uttar Pradesh and Orissa during 1971—81, as already mentioned above. Excluding West Bengal, the figures for these states would be right at the top among the states considered in this study. The corresponding figures for Rajasthan, Himachal Pradesh and Madhya Pradesh are also quite high. One can argue that *the explanation for several small towns growing at a fast rate in the backward regions of India may perhaps be found in their backwardness itself.*

3.7 Emergence of New Towns and the Organisation of Space

3.7.1 It was noted above that the acceleration in urban growth during the seventies, compared with the sixties, is due to higher growth of population in the existing towns and also the increase in the number of census towns in 1981. The total increase in the number of towns in 1981 over that in 1971 is 744, of which a share of more than seventy per cent is claimed by the States of Uttar Pradesh, Madhya Pradesh, Rajasthan, Andhra Pradesh and Orissa, where the increases in the number of towns was 366, 71, 44, 27 and 25 respectively. Needless to mention that these are the five most backward states in the country. All the others have less than 20 additional towns, while in Kerala and West Bengal the number of towns actually declined during the seventies.

In Uttar Pradesh, the increase in the number of urban centres can be partly explained in terms of definitional factors, as noted above. The Town Area Committees (TACs) were not included in the list of local-self-government that should have automatically qualified as census towns (as per the Registrar General's instructions) in 1961 or 1971. The TACs identified as towns in 1981 constitute about ninety per cent of the additional towns. One must, however, add that many of these settlements were not TACs in 1961 or 1971 and acquired this status only during 1961—81. Besides, of the 366 additional towns, only 180 settlements are those that were declassified in 1961 or 1971 and have regained their urban status in 1981. It is, therefore, impossible to dismiss the increase in the number of towns in Uttar Pradesh in 1981 as a purely definitional phenomenon. The explanation must be sought in terms of the development dynamics or its absence in the state. The emergence of a large number of new towns in other underdeveloped states also needs careful investigation.

3.7.2 The inter-state distribution of new towns in the 1981 census shown in interesting pattern (see Map V). Uttar Pradesh alone has 182 new towns out of a total of more than 600 in the country. These towns are distributed in an uneven manner. Large concentrations occur in the Lucknow-Kanpur and Banaras-Allahabad regions and in the neighbourhood of Delhi. If towns with population of less than 3500 that do not have many urban functions are ignored, the entire north-western Uttar Pradesh would appear barren with regard to the new towns. Similarly, in Bihar, a number of new towns have come up in close proximity to the state capital and in the Dhanbad coal belt. The other concentrations of new towns are around the cities of Bombay, Goa, Cannanore, Trichur, Ernakulam, Hyderabad and Vishakhapatnam.

3.7.3 From this emerging pattern, one would postulate that there has been a limited dispersal of growth impulses from a few large urban centres to their hinterland, specially during the seventies, leading to the emergence of a number of new towns. The new towns that are not in the neighbourhood of large cities are mostly district or taluka headquarters that owe their existence and growth to government investment in infrastructure and creation of employment in the government sector. This pattern is more prominent in the backward states where the process of industrialisation through market forces is weak. It is clear that a section of the workforce pushed out of the rural economy has sought reabsorption in the villages around the large cities as it has become increasingly difficult for them to find shelter within the cities. This is responsible for the emergence of several new towns. This development dynamics, however, has unfortunately remained confined to the neighbourhood of a few large cities and to certain administrative centres. *The process of rural-urban transformation is, thus, weak beyond certain distances from the city or the urban agglomeration corridor, unless of course the settlement happens to be an administrative centre.*

3.7.4 It is striking that only a handful of 232 new settlements in the size-class of five to ten thousand were declared as urban in the 1971 census, when the number of villages with population above five thousand was 4,197 in 1961. In 1981 also, a small fraction of the villages in the corresponding size-category became urban. It is important to note that the number of rural settlements in the above size-category was 6,332 in 1971, implying a growth rate of 50.86 per cent in the number during the decade and this is

much higher than the growth rate in number of urban centres in classes V and VI. This leads to the conclusion that, despite a high growth of population, substantial increase in the size of several rural settlements, and increase in their density of population, the large-sized villages are not acquiring the necessary urban characteristics. Only an in-depth study of the economic base and the infrastructural facilities in these rural centres can help in determining the factors responsible for this. However, *one would not be wrong in believing that it is primarily the absence of occupational diversification due to non-availability of opportunities in industrial and territory sectors in the lower order settlements that is constraining the pace of rural-urban transformation.*

3.7.5 A disturbing feature of the changing settlement hierarchy in India is that a number of settlements have reverted back from urban to rural category in the fifties, sixties and seventies. This may be attributed, only partially, to the use of discretionary rights by the Director of Census Operations in the states. One notices that some of the states in which a large number of towns are declassified in a census year also have a sizeable addition to the total number, due to identification of 'new' census towns both in 1961 and 1971. This rules out discretionary factors as being crucial in the explanation of the declassification of the towns in these censuses. *The phenomenon of declassification can, therefore, be attributed to the unstable economic base of the small towns, causing temporal fluctuations in the share of non-agricultural workforce.*

3.7.6 It may be pertinent to ask at this stage why, over time, in vast areas of the country, rural settlements are not acquiring urban characteristics. These are two kinds of problems in the emergence of new towns that must be recognised and analysed empirically. One, in some regions there are not many settlements large enough to qualify as urban centres or to perform urban functions. Two, the economic base of the large-sized rural settlements is very weak and volatile and, therefore, they fail to attract industrial or tertiary activities. It was noted above that a number of settlements get declassified and reclassified as urban centres in each census owing to the change in the non-agricultural component in their male workforce.

3.7.7 The density of the urban centres, defined as the number of cities/towns per thousand square-kilometres (town density), for the country as a whole

3. Of the 366 additional towns in Uttar Pradesh in 1981 only 182 are new towns-settlements that are classified as urban for the first time. The rest are those that have only regained their urban status.

works out to be only one. This is extremely low compared with even some of the other less developed economies of Asia, Africa and Latin America. Even with this low town density, the situation would have been manageable if the towns were distributed evenly in space or corresponded with the distribution of population. This, unfortunately, is not the case. The mountainous states like Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, etc., have a low town density which can perhaps be explained in terms of their rough terrain, fewer people per thousand square-kilometres and the nature of economic activities there. However, the cases of Orissa, Rajasthan, Madhya Pradesh and Andhra Pradesh, wherein vast tracts of rural areas are not 'served' by any urban centre should be viewed with concern by planners. The town density for these states are much below the national average, and within the states there are zones of urban concentration. Bihar has a town density which is slightly higher than the national average, but the number of cities/towns per million rural population is the lowest here. If one determines the areas of service or influence for each urban centre using certain distance or connectivity as the criterion, Bihar will have an exceedingly high percentage of 'unserved' rural population (followed closely by Orissa). One must, therefore, include Bihar as belonging to the category of problem states with regard to the organisation of space. It is ironical that Maharashtra, the most urbanised State of India (see Table I, the urban to rural population percentage for the state being 53.9), is highly under-urbanised, judged by the criterion of town density. One can, thus, see that the problem of inadequate urban support to the rural economy exists in an acute form not merely in the less urbanised states but also in some of the relatively urbanised ones.

3.7.8 Intra-state disparity in the density of urban centres is very high in the backward states/regions and this aggravates and problem further. The districts in Northern Bihar, Eastern Uttar Pradesh, Inland (non-coastal) Orissa and Eastern Maharashtra have

very few urban centres. The cases of Darbhanga and Purnea, two stagnating districts in Bihar, having one town in one and a half thousand square kilometres on an average, are really serious as the density of the rural population here happens to be one of the highest in the country. The districts of Saran and Muzaffarpur have the same town density as the country as a whole, but they have over three times the corresponding rural population in a square-kilometres. In Madhya Pradesh, the Bhopal-Indore region, comprising Bhopal, Mandsaur, Ratlam, Jhabua, Indore, Dewas, Khargone and Shajapur districts, and the Jabalpur neighbourhood comprising Jabalpur, Chhindwara and Hoshangabad districts, have town density figures comparable with the national average. The figure for the rest of the state is miserably low. In Orissa, the coastal districts, viz., Ganjam, Cuttack and Balasore, have relatively high density of urban centres (although below the national average) but for the inland districts the figure is alarmingly low. In the drylands of Western Maharashtra, comprising Akola, Chandrapur, Bhandara, Bhir, Yeotmal, Buldhana and Aurangabad districts, the town density is as low as that of Madhya Pradesh. In Uttar Pradesh, the disparity in the density figures seems to be the highest. The hilly districts of the state, viz., Uttara Kashi, Chamoli, Pithoragarh, Almora on the one hand and the backward districts of North-eastern Uttar Pradesh, viz., Bahraich, Gonda, Basti, Gorakhpur and Deoria, on the other, have an extremely under-developed (urban) settlement base while in several districts of Western Uttar Pradesh the town density figures are twice the overall figures for the country. The problem is also serious in the whole of Rajasthan, barring what may be called the Jaipur-Ajmer region comprising Jaipur, Jhunjhunu, Bharatpur, Sikar, Tonk and Ajmer districts. *The conclusion, therefore, emerges inescapably that a substantial segment of the rural population, specially in the backward states do not get served by the urban system in India. They have, in general, very poor access to the social and economic infrastructure and, consequently, do not get incorporated in the mainstream of development activities.*

Economic Base and Socio-Economic Infrastructure : The Dynamics of Growth in Cities and Towns Experiencing Fast, Medium and Slow Rates of Demographic Expansion

4.1 *A Framework for Explaining the Variation in the Growth Rates of Urban Centres*

4.1.1 The analysis of the preceding chapter indicates that India has experienced a very fast growth rate of urban population during the last census decade, a rate significantly above that of any other decade in the present century. The results, however, reveal that the incidence of high growth-rate has not been uniform. It has been extremely uneven across regions and size-categories or urban centres, presumably due to differences in the socio-economic base of cities and towns. It is, therefore, important that the socio-economic factors causing this differential growth are clearly understood. The basic objective of this chapter is to statistically determine the economic and infrastructural parameters responsible for urban growth in case of the fast-growing urban centres in India. Similarly, for the slow-growing and stagnating towns, an attempt has been made to identify the reasons for their slow growth and stagnation. This should enable us to work out an effective policy of intervention in the process of urbanisation so that the bottlenecks responsible for the slow growth in the presently languishing towns can be removed.

4.1.2 In order to get an insight into the dynamics of urban growth, we examine the economic and infrastructural base of towns belonging to the fast, medium and slow-growth categories. In analysing the economic and infrastructural base of the towns our main purpose is to see, (1) whether the level of industrial base, infrastructure and civic facilities vary across the towns experiencing fast, medium and slow rates of population growth during sixties and seventies, and (2) whether the level of industrial base and infrastructure and other facilities vary across different size-classes within the fast, medium and slow-growth categories of urban centres.

4.1.3 **Selection of Towns and Indicators :** Based on the decadal growth rates of population during

1961—71 and 1971—81, the cities and towns are grouped in fast, medium and slow-growth categories :

(a) Considering the growth-rate of 50.00 per cent in a decade to be reasonably high, the cities and towns growing at a higher rate during sixties or seventies are designated *fast-growing towns*.

(b) Those with a decadal growth rate of less than 10.00 per cent (including negative growth) in either of the decades are called *slow-growing or stagnating towns*.

(c) Cities/towns with a growth rate between 10.00 per cent to 50.00 per cent in either decade are designated as *medium-growth towns*.

It is important to mention that these three are not mutually exclusive categories and a town would belong to any one or two categories, depending on the town's growth rates in the two decades.

For the purpose of analytical convenience, the six size-classes of towns as given in the Population Census are regrouped into three classes namely, *large towns* (cities with population above one lakh), *medium towns* (consisting of class II and III towns with population between 20,000 and 1,00,000), and *small towns* (comprising class IV, V and VI towns with population below 20,000).

4.1.4 The distribution of fast, medium, and slow-growth towns belonging to large-, medium- and small-size classes, as selected for the present analysis, is given in the Table below. In all 1095 towns belonging to our three size (population) classes and three growth categories are selected from different states of India. It must be mentioned that, while all the towns belonging to fast and slow growth categories (as defined above) are included in the analysis, in the case of medium-growth towns only a ten per cent sample is selected as the number of such towns is pretty large.

Size-Class Distribution of the Selected Towns Growing at fast, Medium and Slow Growth Rates during the Sixties or Seventies

Growth categories	Large towns		Medium towns		Small towns		Total	
	(Class I)		(Class II and III)		(Class IV, V and VI)			
A. Fast Growth								
(Growth above 50%)	(a)	82 (66.60)	284	(60.09)	192	(37.94)	558	(50.95)
	(b)	14.69	50.89		34.40		100	
B. Medium Growth								
(Between 10 to 50%)	(a)	36 (29.26)	116	(24.89)	111	(21.19)	263	(24.01)
	(b)	13.68	44.10		42.20		100	
C. Slow Growth								
(Less than 10%)	(a)	5 (4.60)	66	(14.16)	203	(40.11)	274	(25.02)
	(b)	1.82	24.58		74.08		100	
Aggregative Level								
	(a)	123 (100)	466	(100)	506	(100)	1095	(100)
	(b)	11.23	42.55		46.21		100	

Notes: (a) The figures in brackets in first row, (a), show the percentage share of fast, medium and slow-growing towns in a particular size class to the total towns in that size class.
(b) The figures in second row, (b), indicate the percentage share of large, medium and small towns in a particular growth-category to the total towns in that growth-category.

The distribution of fast-, medium- and slow-growth towns across size-classes of urban settlements reveals an interesting pattern. The incidence of fast-growing towns (measured as a percentage of fast-growing towns in a size-class to the total towns in that class) goes down as one moves from higher- to the lower-order size-classes. The opposite is true for the slow-growing or stagnating towns. The percentage of stagnating towns is found to be the lowest among the large towns (cities), while for the fast-growing towns it is the highest. This suggests that there is a distinct relationship between the size-class and the growth-rate of urban centres. The small towns constitute a very large proportion of the stagnating towns in India, as also discussed in the previous chapter. They account for almost two-thirds of all slow-growing towns, a figure far above the share of small towns in the total urban centres. The share claimed by the cities in the total of the slow-growing towns, on the other hand, is less than two per cent, while their share in the number of urban centres is about seven per cent.

4.1.5 Despite the limited data base at the town level, as many as 31 indicators of industrial and infra-structural development have been constructed in an attempt to explain the inter-class and intra-class differences in population growth of urban centres in India. These indicators have been grouped into five categories as presented below :

Categories of Indicators

(i) Industrial development,

- (ii) Municipal finance,
- (iii) Infrastructural development, including indicators of accessibility to administrative and transport network,
- (iv) Civic amenities, and
- (v) Others.

(i) *Indicators of Industrial Development*

- (1) Percentage of male workers engaged in cultivation in 1971
- (2) Percentage of male workers engaged as agricultural labour in 1971
- (3) Percentage of male workers in household manufacturing in 1971
- (4) Percentage of male workers in non-household manufacturing in 1971
- (5) Percentage of male workers in construction in 1971
- (6) The percentage of male workers in trade and commerce
- (7) The percentage of male workers in other services
- (8) Male participation rate (male workers as a proportion of male population) in 1971
- (9) Average number of commodities manufactured

(ii) *Municipal Finance (1969-70)*

- (10) Receipt through taxes per thousand population (in rupees)

- (11) Total municipal receipt per thousand population (in rupees)
- (12) Expenditure on general administration per thousand population (in rupees)
- (13) Total expenditure per thousand population (in rupees)
- (iii) *Infrastructure Development (1971)*
- (a) *Level of Facilities*
- (14) Average road length (in km) per thousand population
- (15) Average number of electrical connections for domestic use per thousand population
- (16) Average number of electrical connections for industrial and commercial use per thousand population
- (17) Average number of financing institutions per thousand population (The index of financing institutions has been constructed through an aggregation of banks, agricultural credit societies and non-agricultural credit societies, with appropriate weightages. The weight is unity in the case of agricultural and non-agricultural credit societies and two for banks).
- (b) *Accessibility to Administrative and Transport Network (1971)*
- (18) Distance from the nearest class I city (in km)
- (19) Distance from its state headquarter (in km)
- (20) Distance from its district headquarters (in km)
- (21) Distance from its nearest sub-divisional headquarters (in km)
- (22) Distance from the nearest railway station (in km)
- (23) Distance from the nearest bus stand (in km)
- (iv) *Civic Amenities (1971)*
- (24) Average number of sanitation units per thousand population (The index of sanitation facilities is derived by aggregating the number of water-borne, dry and other latrines by assigning them appropriate weights, the weights being 3, 2 and 1 respectively.)
- (25) Protected water supply per thousand population (in litres)
- (26) Average number of medical centres per thousand population. (The index of medical facilities is derived through a simple summation of the number of hospitals, primary health centres, dispensaries and veterinary hospitals.)
- (27) *Educational Index* : Average number of educational institutions per thousand population (The index of educational facilities is constructed by aggregating the number of primary schools (1), senior secondary schools (2), high schools (3), polytechnics/typing institutes (5), colleges for general education (6) and medical/engineering/agricultural colleges (7), with weights that have been shown against each within parentheses.)
- (28) *Recreational Index* : Average number of recreational centres per thousand population (The index of recreational facilities is constructed by aggregating the number of public libraries, drama halls, cinema halls and stadia with appropriate weights. The weights assigned to them are 1 for public libraries, 2 for drama halls, and 3 for cinemas and stadia.)
- (29) Average number of households per census house
- (v) *Others (1971)*
- (30) Percentage of male literates
- (31) Females per thousand males (sex ratio).
- 4.2 *Industrial and Infrastructural Base of Fast- and Slow-growing Towns in India*
- 4.2.1 Let us begin with a discussion of the economic base of fast-and slow-growing towns based on the average values of the selected indicators. The pace of industrialisation and the consequent shift of workforce from the primary to the manufacturing sector generally results in population moving from rural areas towards towns and cities. The process of urbanisation is said to be associated with industrialisation as an instrument in promoting economic development. The mobility of population from rural to urban areas is, therefore, looked upon as a horizontal response to the vertical shift in the working population from primary to secondary and tertiary sectors. The cities and towns with higher population growth rates are, therefore, believed to have a growing and diversified economic base compared to those growing at a slow pace.
- 4.2.2 Table XIV which shows the distribution of workers in relevant industrial categories in 1971 provides insights into the process of industrialisation in the fast- and slow-growing towns of India. It is striking that the stagnating towns have about 12.26 per cent of male workers engaged as cultivators; the corresponding figure for the fast-growing towns is low, viz. 9.46 per cent. A similar pattern emerges in the

case of agricultural labour. These two categories (i.e. cultivator and agricultural labour) together account for about 23.00 per cent of the total workforce in the slow-growing towns, a figure far above the average of the fast-growing towns, which is only 17.10 per cent. The former figure is higher than the national average for all urban centres, viz. 19.28 per cent, as well. The same is true for household industry. In fact, the difference in the proportions of workers engaged in household industry between the fast- and slow-growing towns is quite pronounced, the figures being 4.72 per cent for the former and 6.64 per cent for the latter.

In the case of other categories of workforce, the pattern is, however, different. For the 'Other Services' category, the proportions of workers in the fast and slow-growing towns, on an average, are more or less the same. In case of non-household manufacturing industries, trade and commerce, and construction, the percentages of workers are higher in the fast-growing towns compared to the slow-growing towns, the gap being particularly significant for non-household manufacturing industries. One may, therefore, infer that fast-growing towns in India have a more developed manufacturing base compared to the slow-growing towns. Thus at least at the *aggregative level*—when all the towns (irrespective of their size and growth rates) are taken together—one can establish a positive correlation between urban growth and the percentage of workers in non-primary sectors, excluding, of course, the household industries. A relatively developed base of non-household manufacturing industries, along with trade and commerce, seems to be providing some sort of stability to the economic base of the urban centres which is responsible for their fast demographic growth.

4.2.3 The fast-growing urban centres are better placed than the others with regard to municipal income and expenditure (see TABLE XVI). The per capita municipal income in these towns is about 31.00 per cent higher than that in the slow-growing towns. The municipal bodies in the former are able to generate larger financial resources mainly through their tax earnings, the difference in the receipt through taxes per capita being as high as 67.00 per cent between the two categories of towns. Because of their better financial position, the fast-growing towns enjoy considerable advantages in terms of per capita municipal expenditure over their slow-growing counterparts. Relatively higher expenditure should help the former in ensuring better availability of infrastructure and other facilities.

4.2.4 Indeed, Table XV supports the proposition that the infrastructural and administrative facilities

and transport connectivity are higher in the fast-growing towns. Striking differences are noted in the level of infrastructural facilities between the fast and slow-growing towns. The average road length per thousand population in the fast-growing towns is higher by 34.00 per cent than in the stagnating towns. The same pattern emerges in the case of average number of electric connections, both for domestic and industrial/commercial use, the gap being larger in the case of the latter.

As regards proximity to places of administration the fast-growing towns report much shorter distances from the state, district and sub-divisional headquarters as compared with the slow-growing towns. The same is true for the connectivity of these towns to railway stations and bus routes. One can, thus, conclude that, so far as the infrastructural base is concerned, the fast-growing towns have a definite edge over the slow-growing towns. The former not only possess a relatively higher level of infrastructural facilities, they are also, due to their proximity to the administrative centres and transport network, able to drive additional facilities from their neighbouring centres.

4.2.5 The distributional pattern of civic amenities (see TABLE XVI) is seen to be different from that of municipal expenditure or infrastructural facilities. While the fast-growing towns have a higher level of water supply and sanitation facilities (as the average values of the corresponding indicators are significantly higher than for the stagnating towns), the opposite is true for the rest of the amenities like housing and medical, educational and recreational services. The fast-growing towns possess less units per thousand population compared to the slow-growing towns in the case of all these amenities. It appears that, with ever-increasing pressure of population in the fast-growing towns, these are finding it difficult to meet the demand for civic amenities. It may, however, be noted that, in spite of their having fewer educational institutions per thousand population, the literacy rate is higher in the fast-growing towns. This may be explained in terms of the size and quality of the educational institutions. It can also be attributed to the immigration of educated and literate persons into these cities and towns, as there would be a demand for such skilled and literate labour-force in their manufacturing and formal tertiary activities.

4.2.6 The discussion so far reveals that the economic base of the fast-growing towns is more diversified than that of their slow-growing counterparts. It also seems that, because of their developed manufacturing base and associated tertiary activities,

these towns are able to generate higher municipal income and incur larger expenditure for infrastructural facilities and public amenities. This is evident from the greater availability of road and electric connections in the fast-growing towns. Furthermore, due to their locational closeness to the administrative centres and transport network, these towns enjoy easy access to the array of services available in the neighbouring towns. In the case of civic amenities, however, the fast-growing towns are in a disadvantageous position compared to their slow-growing counterparts, which reflects the pressure of the growing population on these amenities in the former.

4.3 *Industrial and Infrastructural Base of Fast-growing, Stagnating and Medium-growth Towns in Different size Categories*

4.3.0 The analysis of economic base, infrastructural facilities, public amenities, municipal earnings and expenditures in the preceding section was based on the aggregative data for the urban centres belonging to the fast-, medium and slow-growth categories. In the present section, an attempt is made to examine the variation in the indicators across different *size-classes* of urban centres within and across the *growth categories*.

4.3.1 Industrial Base :— It is striking that the proportion of workers engaged as cultivators, agricultural labourers and household industrial workers is considerably higher in small compared to large towns (see TABLE XIV). In fact, the percentage of workers engaged in agriculture in small towns is about three times that of the large towns. But does the industrial base of fast-growing large towns (or small towns) differ from that of slow growing large towns (or small towns)? When comparing the towns in different size-classes within the high-, medium- and slow-growth categories, the small towns are noted to have a higher level of dependence on agriculture in all cases. But the opposite is true with regard to employment in non-primary activities. The proportions of workers engaged in the non-household manufacturing industries and trade and commerce are much higher in large compared to small towns. The differences between large and small towns for construction and other services are less, but still large towns have significantly higher values. Thus, it is clear that the large towns at the aggregative level as well as in fast-, medium- and slow-growth categories exhibit a diversified economic base compared to the small and medium towns.

The analysis reveals that the proportion of workers engaged in the non-primary sector is higher in fast-growing large towns by about 16.00 per cent com-

pared to slow-growing large towns. The opposite is, however, true in the case of proportion of workers in the agricultural sector. There are a few other differences in the relative employment position in secondary and tertiary activities. The *fast-growing large towns* have a larger proportion of workers in manufacturing and construction compared to their slow-growing counterparts, the gap being particularly wide for manufacturing. In the case of trade and commerce and other services, however, the *slow-growing large towns* tend to have an edge over the *fast-growing large towns*. One can thus hypothesise that the *stagnating large towns* have a weak manufacturing base which is responsible for their slow growth. One can also argue that tertiarisation of the economy without a corresponding growth of manufacturing sector tends to be detrimental to the overall growth of cities in India.

The pattern appears to be more systematic in the case of fast growing and stagnating towns within the small-size class. The dependence of workforce on agriculture and household industry is much higher in the stagnating small towns than in their fast-growing counterparts. The opposite is true for employment in the non-agricultural sectors. Within the non-primary sector, however, the gap between the two categories of towns is very wide for construction and trade and commerce, followed by other services. In the case of the non-household manufacturing sector, the difference between the two is not much.

One can thus infer that the fast-growing towns in large as well as small size-categories, have a more diversified economic base as compared to their stagnating counterparts and, as a result, are able to absorb more incoming population from rural areas. However, while the large towns belonging to the fast-growing category experienced high population growth due to their relatively developed non-household manufacturing industries and trade and commerce, in case of fast-growing small towns it is due only to trade and commerce and construction activities.

4.3.2 Municipal Finance Income and Expenditure : To the extent that the financial strength of local governments in cities and towns is determined by their level of economic activities, municipal income and expenditure should follow the pattern of industrial and commercial development (see TABLE XVI). This indeed is the case. It is seen that the level of total income as well as income from taxes per thousand of population is much higher in large towns than the small and medium towns. The same is true for total expenditure per thousand population, the figures in cities being larger by about one hundred per

cent than in small towns. Similar differences are observed between large and small towns within fast- and medium-growth categories. In the case of stagnating towns, however, the smaller urban settlements have a slightly higher level of income and expenditure per thousand population. Also, between the fast- and slow-growing towns within the large-size category, the former (i.e. fast-growing large towns) enjoy a higher level of income as well as expenditure when compared to the latter.

The pattern for fast- and slow-growing towns belonging to the small-size class is somewhat different. Unlike the fast-growing large towns, it is the slow-growing small towns that manage to have a higher per capita revenue and expenditure, the gap between the two being wider in the case of expenditure. It is, therefore, very clear that the rapid growth of population in the small towns has put immense pressure on the civic amenities and local bodies are finding it difficult to maintain a reasonable level of services. The low level of per capita earning and expenditure must ultimately affect the maintenance of basic amenities which will result in the deterioration of the facilities. Unless municipal revenue and expenditure in these fast-growing small towns are strengthened, it would be difficult for them to accommodate future immigrants and maintain their growth rates.

4.3.3 Infrastructural Facilities : The pattern emerging with regard to the distribution of infrastructural facilities across towns of different size-classes is equally interesting (see Table XV). Practically in all the indicators of infrastructural development, namely roads, banking facilities, and electric connection for domestic and industrial/commercial use, the large towns show a lower level of facility, in per capita terms, compared to the small and medium-sized towns. This is also true for the large towns belonging to fast-medium and slow-growth categories. This means that, in spite of their better resource position, the large towns, in general, are not able to provide adequate infrastructural facilities to their total population in per capita terms. This can be attributed to the fact that a large section of the population living in slum areas and shanty settlements have no share in these facilities, and while the rest of the city population enjoy them at a fairly high level. This result in the per capita figure for the large towns (cities) working out to be low. These towns, however, are in a good position with regard to accessibility to administrative centres and transport network.

The distribution of these facilities among the cities across different growth-categories reveals an interesting pattern. Between the fast- and slow-growing towns belonging to the large-size category, the former (i.e.

fast-growing large towns) show an edge over the latter in terms of availability of roads, banking units, and electrical connections for domestic use. The fast-growing large towns also have the advantage of being close to railway stations or bus routes. Thus, among the large urban centres, it is the slow-growing towns that suffer more from the inadequacy of infrastructural facilities and inaccessibility to the transport system. A similar pattern is observed in the case of fast-growing and stagnating towns belonging to the small-size category. In case of all infrastructural facilities, such as roads, power, banking etc., the fast-growing towns exhibit a much higher base than their slow-growing counterparts within that category.

Regarding proximity to administrative towns, the pattern is not quite clear. The fast-growing small towns are found to be a bit closer to the state headquarters than the slow-growing small towns, but the opposite is true in the case of their proximity to class I cities. In the case of distance from district headquarters, there is little difference between the two types of towns within the category.

In conclusion, we may say that, although large cities, on an average, exhibit a lower per capita level of infrastructural facilities—presumably due to a high incidence of slum and poor people—the slow-growing large towns suffer more due to serious deficiencies in infrastructural facilities. In fact, both large and small towns of the fast-growing category enjoy a relatively better supply of road, power and banking facilities than their slow-growing counterparts.

4.3.4. Civic Amenities in Different Categories of Urban Settlements : The distribution of civic amenities between large and small towns shows the same pattern as noted for infrastructural facilities (see TABLE XVI). With the exception of water supply, the small are in a better position in terms of housing and sanitation, and availability of educational, medical and recreational facilities per thousand population, as compared to the large towns.

Between the fast- and slow-growing towns belonging to the large-size category, the fast-growing towns have a higher level of civic amenities for practically all services, the difference between the two being particularly large for water supply, medical care and sanitation facilities. The same is more or less true for the fast-growing towns belonging to the medium-size category as well.

In the case of the slow- and fast-growing towns belonging to the small-size category, the relative position is not very clear. The fast-growing small towns have a larger number of latrines per thousand population, but the opposite is true for water supply and

medical facilities. And yet, in the case of other services, viz., housing, educational and recreational facilities, the difference between the two is marginal. The lower level of civic amenities in the case of fast-growing small towns could be due to population pressure on existing facilities and the incapacity of the local governments to meet growing demand.

4.4 *Growth rate of Population and Industrial and Infrastructural Base of Administrative and Railway Towns*

4.4.0 It is postulated above that the administrative status of a city or town or its railway connection plays an important role in promoting economic activities and population growth. In the preceding section, we tried to examine this thesis by looking at the difference in the average distance of fast-and slow-growing towns from administrative cities/towns and transport systems. In the present section, we analyse the importance of such places (i.e. administrative towns and railway stations) by computing average population growth figures, proportions of workers in manufacturing and tertiary activities, and level of infrastructural facilities separately for towns with administrative headquarters and those with railway stations. The average figures for these towns when compared with the corresponding figures for the other towns enable us to determine whether there is a clear pattern. This analysis is attempted to strengthen the conclusions drawn in the earlier section.

4.4.1 District vs. Non-district and Non-sub-divisional Towns : Table XVII which gives the average values for a selected set of socio-economic indicators for district headquarters and 'other towns' (other towns also exclude sub-divisional headquarters) reveals that the urban growth-rate of the district towns was relatively higher during sixties and seventies as compared to that of other towns, the percentage difference being more pronounced during 1961—71 than in 1971—81. The relatively rapid growth in urban population could be attributed to the greater absorptive capacity of the district towns, due to their diversified economic base. The share of workers engaged in the non-primary sector is about 68.00 per cent, which is significantly higher than that of the 'other towns', viz., 58.00 per cent. The difference is more striking for trade and commerce and other services, which can be attributed to the generation of various forms of tertiary employment associated with district administration. By virtue of relatively developed secondary and tertiary activities and financial support from government, the district towns also acquire a higher level of municipal income and expenditure per thousand population.

Despite the better resource position, it is unfortunate that the district towns are not in a position to maintain a higher level of infrastructural and civic amenities (see TABLES XVIII & XIX). In case of all the indicators of infrastructure and civic amenities such as roads, power, banking, water supply, housing, medical and recreational facilities, and educational services, the district towns exhibit lower values as compared to the other towns. From this one may infer that the district towns are unable to meet the growing demand for infrastructure and civic facilities due to their ever increasing migrant population. It is worthwhile to mention here that in the previous section, on the basis of an analysis of average values, lack of proper civic amenities and infrastructural services was noted as the major problem of growth in the case of large towns (cities) also.

4.4.2 Sub-divisional vs. Non-sub-divisional Towns: We noticed above that district towns have a relatively well-developed secondary/tertiary sector compared to other towns, but that the opposite is true in the case of infrastructural and civic facilities. With a few exceptions, the same pattern seems to be emerging in case of sub-divisional and non-sub-divisional towns as well. The sub-divisional towns exhibit a faster population growth during the sixties and seventies compared to the non-sub-divisional towns, the difference being particularly large during sixties. This was noted to be the case for district headquarter towns as well. Furthermore, sub-divisional headquarter towns tend to have a diversified economic base, with about 64.00 per cent of the workers engaged in secondary and tertiary activities, a level which is significantly higher than that in non-sub-divisional towns as well as for all urban centres in India. The opposite is, however, true for employment in the agricultural sector. Among the various secondary and tertiary activities, interesting variations exist between sub-divisional and non-sub-divisional towns. Unlike the district towns, the sub-divisional towns do not have an edge over the non-sub-divisional towns in the proportion of employment in non-household manufacturing or construction activities. On the contrary, the proportion of employment in manufacturing industries is slightly higher in non-sub-divisional towns while it is nearly the same for construction. It is only in case of trade and commerce and other services that the sub-divisional towns have an edge over the non-sub-divisional towns. Thus one can argue that, while the manufacturing sector has developed in the district towns, which in turn is responsible for their fast demographic growth, the tertiation of the urban economy is the main feature of sub-

divisional towns. Tertiary activities connected with the administrative functions of the sub-divisional towns seem to be growing without a corresponding growth of the secondary sector.

In the case of municipal finance, like the district towns, the sub-divisional towns report a higher level of income and expenditure over the non-sub-divisional towns (see TABLE XIX). But despite the better financial position, the sub-divisional towns, in general, are not able to maintain a higher level of infrastructural facilities and civic amenities in terms of roads, water supply, power for industrial and commercial use, and medical, recreational and educational services. The same was true for the district headquarters as well, as noted earlier. One can, therefore, argue that the supply of infrastructure and civic facilities has not kept pace with growing population in the sub-divisional towns also.

The above analysis reveals that, between district and sub-divisional towns, the former show a significantly higher level of industrial activities. In fact, there appears to be a positive association of urban growth, industrial development and municipal finance with the hierarchy of administrative towns. As we move up in the administrative hierarchy, from non-sub-divisional towns to sub-divisional (non-district) towns and then to district towns, the average values of the indicators relating to the above-mentioned aspects increase rapidly, presumably due to the advantages associated with the administrative status of these towns.

4.4.3 Growth Dynamics in Towns with and Without Railway Connection

Let us now analyse the growth dynamics of towns with and without rail connection. The growth rate of population for towns with rail connection has been higher than for those without one during both the decades under consideration (see TABLE XX). This could be attributed to the more developed and diversified economic base of the towns with railway connection. With the exception of construction activities, employment (as a proportion of total workforce) in all the non-primary activities is higher in these towns, the difference between towns with and without the railway connection being particularly high in the case of non-household manufacturing industries. But the opposite is true in case of agriculture and household industries as the towns with rail connection show much less dependence on these two economic activities.

The relatively strong secondary and tertiary sectors results in a much higher level of municipal finance in towns connected by railway than in those that are not. The average municipal income as well as expenditure per thousand people is much higher in these towns compared to the others. It is also observed that the towns with rail connection are in general closer to the administrative centres viz. state, district or sub-divisional headquarters or a class I city (see TABLE XXI). They are, therefore, able to derive benefits from such locational proximity.

The indicators of industrialisation, municipal finance, accessibility to the administrative centre etc., and those relating to infrastructure and civic amenities reveal two different patterns. While in case of sanitation and water supply, the towns with rail connection show higher average values, for roads, power, banking, housing, and medical, educational and recreational facilities per thousand population, these are much less than the towns lacking in a rail connection (see TABLE XXI and XXII). This finding, once again, underlines the fact that, in general, the large towns, including the district and sub-divisional headquarters and towns on railway lines that have experienced fast urban growth in the recent past, suffer from deficiencies in basic civic amenities. This calls for major government intervention in the context of providing civic amenities and economic infrastructure in small and medium towns to ensure a balanced urban industrial development.

4.5 An analysis of Inter-dependencies among Size of Urban Centres and their Growth Rates with Select Socio-Economic Indicators

4.5.0 In the preceding section we have tried to explain the differential growth of urban centres in different size-categories during the sixties and seventies, largely on the basis of the average values of selected socio-economic indicators. In the present section, we attempt a correlation analysis with the object of statistically testing the tentative conclusions derived in the earlier sections. The correlation coefficients between (a) the growth rates of population and the selected indicators, and (b) the population size and the indicators, for the fast-, medium- and slow-growth towns have been computed. The values of correlation coefficients along with their level of significance are given in Table XXIII to XXVIII.

4.5.1 The results, based on averages in sections 4.2 and 4.3, indicated a more diversified economic structure for the fast-growing towns at the aggregate level as well as for the fast-growing towns in the large and small-size categories than for slow-growing towns. It was noted that the proportions of workers

in non-household manufacturing industries, trade and commerce were higher in the fast-compared to the slow-growing towns. The opposite was true for employment in agriculture and household industries.

The correlation analysis confirms statistically most of these results at the aggregative level as well as for the fast-, medium- and slow-growing towns. At the aggregate level, urban growth rate bears a significant and negative relationship with the percentages of workers in agriculture (cultivators and agricultural labourers) and in household industries and, correspondingly, a positive relationship with the share of workers in non-household industries and construction in the sixties and with non-household industries and trade and commerce in the seventies.

Between population growth and the proportion of employment in agriculture and household industries for the towns belonging to the fast-, medium- and slow-growing categories, the correlation co-efficients work out as negative and significant. Within the non-agricultural segment, the construction sector seems to be the major factor responsible for urban growth in the fast- and slow-growing towns during the sixties. During the seventies, however, non-household industries come to occupy the dominant position in the case of fast-growing towns, while trade and commerce emerges as the main factor of urban growth in the slow-growing towns. So, whatever little urban growth is visible in the slow-growing towns, it is mainly due to the expansion of employment in trade and commerce and much less to expansion of non-household manufacturing industries.

It must be mentioned that construction, which was an important urban activity during sixties, became less important during the seventies. This is presumably due to large construction activities being undertaken during Second and Third Five Year Plans and their decline under subsequent plans. Trade and commerce seems to have emerged as an important factor in urban growth during seventies, particularly in the towns belonging to the slow-growing category. The correlation results suggest that the impact of other services on urban growth was not significant during the sixties and seventies. Thus, with minor exceptions, the correlation results confirm the thesis that diversification of economic activities, particularly those in favour of non-household industries, and trade and commerce, are major factors in urban growth during the sixties and seventies.

4.5.2 The analysis of the average of the selected indicators revealed that the economic base in the large towns is stronger than in the small towns in India. The proportions of workers employed in non-household

manufacturing industries and trade and commerce worked out to be much higher in the large towns at the aggregate level. This was also true for cities/towns within both fast- and slow-growing categories. The opposite was true for agriculture and household industry (see 4.2 and 4.3). The correlation results confirm this proposition as the population of the urban centres bears a significant and positive relation with the proportion of employment in non-household industry and trade and commerce and, correspondingly, a negative relation with the share of workers in agriculture and household industry. This relationship holds good at the aggregative level as well as for the towns in the fast- and slow-growing categories.

Since the economic base of the large- and medium-size towns is more diversified than that of the small towns, it is no wonder that these two classes account for about sixty per cent of the fast- and medium-growth towns in India during the sixties and seventies. Against this, as many as three-fourths of the small towns have either experienced stagnation or low population growth due to their less-diversified economic base and higher dependence on agriculture. These results, thus, make a strong case for strengthening the manufacturing base and trade and commerce activities in small- and medium-size towns. With adequate expansion of manufacturing activities and their multiplier effects, these towns should not only be able to absorb the immigrants from the rural areas but also reduce population pressure in the large cities in their neighbourhood by slowing down their growth rates.

4.5.3 In case of municipal finance, the results based on averages indicated a higher level of income and expenditure in per capita terms for the fast- as well as medium-growth towns. Further, between the large and small towns, the former had an edge over the latter, at least at the aggregate level. The correlation analysis, however, does not support the thesis that demographic growth of urban centre is positively related with per capita municipal income or expenditure at the aggregative level, as also for the fast-growing cities/towns. The correlation between size of urban centre and its municipal income or expenditure (per capita) also does not appear as significant at the aggregative level or for different size-classes. This is true for the fast-and medium-growth towns as well. There are, however, a few notable exceptions. Population growth and per capita municipal income/expenditure correlate positively and significantly in the case of slow-growing towns. Also, the correlation between population size and municipal income/expenditure is positive for these towns. From all this,

it may be inferred that the small and (relatively) slow-growing towns belonging to the slow-growth category are having serious problems due to their poor municipal finances. This adversely affects their infrastructural facilities and civic amenities as has been observed below, and results in their low growth rate and small size.

4.5.4 The average value of the preceeding section had suggested that fast- and medium-growth towns tend to have a higher level of infrastructural facilities in per capita terms. This is particularly so in the case of roads and power. Correlation analysis confirms the positive relationship, but only for the electric connections for *domestic use* per thousand population at the aggregate level and for the slow-and medium-growth towns in the seventies. A positive relationship is also confirmed for electric connections for industrial and commercial use in medium-growth towns. For these towns, urban growth shows a positive and significant relationship with the number of domestic connections in the sixties. So the situation, in the case of electric connections for domestic use, seems to be better in the towns that experienced a higher growth rate of population.

Apart from electric connections for domestic use, banking facilities has emerged as an important element of infrastructure explaining variations in urban growth during the seventies as it shows a significantly positive correlation with the latter. There are, however, few notable exceptions that need to be mentioned here. The number of electric connections for industrial/commercial use shows a negative correlation with urban growth for the slow-growing towns during the sixties and for the fast-growing towns during the seventies. It appears that the fast-growing towns are experiencing shortages in the supply of power for industrial and commercial use presumably due to higher demand in these towns. Also, several of the large and fast-growing towns have followed a conscious policy of discouraging further industrial concentration in them and this may be responsible for the negative relationship. In slow-growing towns, however, the supply of power is very low, which is constraining their industrial and commercial growth.

The correlation between population-size and infrastructural indicators are generally insignificant at the aggregative level. But they are positive for certain infrastructural components for the fast-and medium-growth towns, as was suggested by the analysis of the average values. Population size, however, bears a significant negative relationship with the number of banking units in fast-growing towns; the number of electric connections for domestic and industrial/commercial use in medium-growth towns; and with

road length, number of electric connections for domestic use, and banking units in slow-growth towns. The negative relationship between population size and infrastructural indicators is thus more prominent in the slow-growing towns. From this, one would infer that the large towns in the slow-growing category have very poor infrastructural facilities and this is responsible for their low industrial as well as population growth. The large towns are in a much better position with respect to their average distance from administrative headquarter and the transport network, correlation coefficients being negative and statistically significant in most cases during the sixties as well as the seventies. Proximity to an administrative centre and transport network can, therefore, be taken as a factor explaining higher levels of industrial development and demographic growth in large towns and cities in India.

4.5.5 In the case of civic amenities, the result based on averages had suggested a higher level of sanitation and water supply per thousand population in the fast-growing towns than in the slow-growing towns. However, the opposite is true for the other civic facilities, such as housing, and medical, educational and recreational services. The positive relationship between urban growth and the level of water supply is well-confirmed at the aggregative level as well as for the fast-growing towns during the sixties as well as the seventies, and for medium-growth towns during the seventies. It may, therefore, be argued that domestic electric connections (as observed in the previous paragraph) and water supply are the two critical inputs in urban development and small investments in these can improve industrial and population growth potential of the towns significantly.

In the case of educational and medical services, the relationships between their per capita availability and urban growth size generally are negative, that reflect pressure of population in large and fast-growing towns. One can, therefore, postulate that, unless these constraints are removed, it will be difficult to maintain high population growth in many of the fast-growing cities and towns.

Regarding city size and civic amenities, the correlation coefficients, with some exceptions, work out as negative for the fast-, medium- and slow-growing towns. This negative relationship obtains in case of a larger number of indicators for the slow-growing towns. This suggests that the large towns belonging to the slow-growth category have serious deficiencies in their civic amenities, which might provide an explanation for their slow growth. *It would, therefore, be erroneous to concentrate investments only on the fast-growing towns for strengthening their civic amenities.*

Empirical results show that, with improvements in the level of basic civic facilities, many of the currently languishing cities and towns may come out of their stagnating phase and record high or medium urban-industrial growth.

4.6 Conclusion and Their Implications

As stated at the outset, our main purpose in this chapter is to identify the economic and infrastructural factors and civic amenities, that are responsible for differential urban growth across different size and growth categories during the sixties and seventies. An attempt is made here to work out an appropriate policy of intervention in the process of urbanisation for promoting a balanced and healthy urban structure.

The analysis of differential population growth across the size-categories of cities and towns reveals that the prevailing pattern of urban growth is closely associated with the pattern of industrialisation and infrastructural development. The economic base and infrastructural facilities in the fast-growing towns are distinctly different from those of the other towns. The economic base of the former is more diversified, as the proportions of workers engaged in non-household manufacturing industries and trade and commerce are much higher than in the slow-growing towns. The fast-growing towns, in general, are closer to the administrative headquarters and transport network and, consequently, are able to derive benefits from other towns and cities. These towns are also well-placed with respect to the per capita availability of certain infrastructural facilities such as protected water supply, banking units and power connections for domestic use. Compared to these, the economic base of the slow-growing towns is much less diversified, as they depend more on agriculture and traditional household industries. The base of the secondary and tertiary sector is very weak in these towns. They also lack in infrastructural facilities such as power (for domestic use), banking units towns are seriously handicapped as they are generally located at long distances from the administrative centres and railway stations.

The economic factors responsible for differential urban growth at the aggregative level also determine the variation in the rates of growth for the towns within the large, medium and small-size-classes. In general, there is a positive association between the size of the town and the level of diversification of economic activities. The fast-growing towns belonging to both large and small size-classes have a more

diversified economic structure than their slow-growing counterparts. It must, however, be mentioned that the large towns are able to maintain a higher population growth largely due to their well-developed, non-household manufacturing base. The small towns, on the other hand, are able to maintain a high population growth due to expansion in trade and commerce, without a corresponding growth in the manufacturing sector.

From this, it may be inferred that a higher level of manufacturing and trade and commerce activities have been the main sources of urban growth in India during the sixties and seventies. Since the level of these (particularly manufacturing) activities is much higher in large towns, it is no wonder that a very large proportion of these towns (cities) experienced fast population growth. As against this, a very small proportion of the small towns show more than a fifty per cent growth rate. In fact, the bulk of the stagnating towns (viz. about 75 per cent) belong to the small-size class, mainly due to their less-diversified economic base. It is, therefore, absolutely necessary that the manufacturing base of the small towns is developed to a certain extent to promote their growth. This result, thus, calls for a policy of dispersed industrial development to provide stability to the growth of small and medium towns. It supports a strategy of promoting agro-based industrialisation in small and medium towns. It must be mentioned in this connection, that the fast-growing small towns suffer from serious inadequacy of infrastructural facilities. (In fact apart from these towns, many of the fast-growing large towns too are experiencing severe strains in their existing infrastructural facilities and civic amenities, particularly in power for industrial and commercial use and educational facilities that need to be strengthened.) It is, therefore, necessary to have a planned infrastructural development programme in small and medium towns along with a strategy for dispersed industrialisation. Such a policy will not only absorb the flow of people out-migrating from rural areas, but will in the process, also relieve population pressure in the large cities by diverting a section of the prospective immigrants into these small towns. The basic objective of national urbanisation policy, therefore, need not be to discourage industrial and population growth in large cities. Their growth, however, would slow down automatically once programmes for infrastructural and industrial development in small and medium towns and large villages are undertaken with a perspective of balanced regional development.

A Strategy for Industrial Dispersal and Balanced Urban Development

5.1 *Changes in the Sectoral Structure of the Indian Economy*

5.1.1 The negative relationship between economic development and urban growth, as observed in the inter-state and intra-state analysis, suggests that the shift of workforce away from agriculture and the fast pace of urbanisation in the backward regions does not represent a healthy trend. The decline in the dependence of male workers on agriculture by about one percentage point, from 64.7 in 1961 to 63.5 in 1981, as noted above, cannot, therefore, be claimed as a major achievement for the Indian economy, specially since the 1961 figure could be an overestimation arising out of definitional factors.¹ It is also somewhat disturbing that, while the aggregative figures show a decline in the share of agricultural workers during 1961—81, the figures for both urban and rural areas show the opposite trend. Despite the rural and urban economies becoming more dependent on agriculture in 1981 than in 1961, for the total economy the shift has been away from agriculture. This is because the urban component has increased with the graduation of a number of villages into towns during this period. Finally, it is important that, although the 38th Round of the National Sample Survey records a decline of 6.4 percentage points in the share of agriculture, hunting etc. during 1972—83, the increase in the manufacturing component is only by one and a half percentage point. The rest of the workforce displaced from agriculture has been claimed by, (a) construction, (b) wholesale and retail trade, and (c) transport, storage and communication. Undoubtedly all these three categories have a high incidence of low-productive informal employment. It is, therefore, not possible to hold that the decline in dependence on agriculture is a healthy symptom, reflecting a movement away from low-productive agriculture to high-productive industry. The rural-urban migration, can, therefore, be

partially explained in terms of falling labour productivity in agriculture and the absorption of displaced agricultural labour in low productive, urban, informal activities.

5.1.2 It is important to bear in mind that the share of non-farm activities in the total workforce has declined in the rural areas consistently during 1961—81. The fall has been sharp also in the case of household manufacturing activities, its share in the total male workforce declining from 5.54 per cent in census year 1961 to 3.37 per cent in 1971, and further to 3.18 per cent in 1981. On the other hand, activities with a high incidence of informal employment, viz. construction, transport & storage, and trade & commerce in the urban areas have grown selectively as may be inferred from the rise in their combined share in total workforce from 31.4 per cent in 1961 to 32.5 per cent in 1971.

5.2 *Urbanisation and the Growth of the Informal Sector*

5.2.1 The sex ratio (females per thousand males) in the urban areas has increased significantly which, besides a decline in female infant mortality, reflects a fall in male selectivity among the inter-censal immigrants. The improvement in the sex ratio is particularly impressive in the large cities with very low sex ratio. All this suggests a fast growth in informal activities in the urban areas and opening up of job opportunities there for women. Several micro-level studies for the metropolitan cities report a high component of female employment in informal activities in recent decades, much more than was observed in the past.

5.2.2 The fast growth of the urban informal sector and its preference for cheap woman-labour is also

¹See Kundu (1985)

reflected in the fact that, while the unemployment rate for urban males increased perceptively from 27th round to the 38th Round of the NSS, both by weekly and daily employment status, the urban female unemployment rate came down significantly. It may also be noted that the share of self-employed persons among the total urban females declined from 48.4 per cent in the 27th Round to 46.5 per cent in the 38th Round and the percentage of regular wage and salaried workers came down from 27.9 to 26.2. The casual labour component, on the other hand, moved up significantly, from 23.7 per cent to 27.3 per cent during the above period. This trend is noted in case of urban male workers also. While the percentage of regular wage/salaried workers came down from 50.7 to 44.6, that of casual wage-earners moved up from 10.1 to 14.8 during the period 1972–83. All this suggests that, while agriculture and traditional industries have found it increasingly difficult to maintain their relative share in the workforce, the low-productive, informal activities have grown quite fast, particularly in the urban areas, as a direct consequence of the supply of cheap labour in the informal labour market.

5.3 *Structural Shifts in the Economy and the Process of Urbanisation*

5.3.1 The analysis of the intersectoral shifts in the workforce and income provides certain interesting insights that have direct bearing on the national urbanisation policy. It has been mentioned above that the share of agriculture and allied activities in the net national product went down from 52.5 per cent in 1960/61 to 42.9 per cent in 1973/74, at 1960/61 prices, despite a rise in its share in the total workforce (also in the male workforce). The comparable inter-country figures published by the World Bank indicate that the share of agriculture in the national product in India declined drastically from 47.0 per cent in 1964/65 to 31 per cent in 1984/85. The dependence of this sector on the workforce has, however, fallen only marginally during the seventies and early eighties, as discussed in the earlier section. This would imply a widening of the gap between productivity in the agricultural and non-agricultural sectors. Value added in agriculture increased by 2.7 per cent per annum during 1965–80 while that in manufacturing increased by 4.4 per cent during the same period and by 5.6 per cent during 1980–85. The corresponding growth estimates for the service sector are 4.8 and 7.5 per cent respectively. All this has accentuated the disparity in per capita income between the primary and secondary/tertiary sectors.

5.3.2 It is clear that much of the expansion in the registered manufacturing and the organised service sector has been restricted to a few large urban centres. The district and taluka headquarters have got a small share in it, and that too due to direct and indirect government support. The urban-rural income gap in per capita terms has widened as a result of the concentration of organised industrial and tertiary activities in the large cities. The ratio of urban to rural per capita income was 1.56 in 1950/51, which went up to 1.8 in 1970/71. The ratio moved up further to 2.7 in 1980/81. When we consider urban-rural differentials in terms of economic infrastructure and social amenities, the gaps are seen to be much more alarming.

5.3.3 Rural-urban migration in the face of growing rural-urban disparity has been taken as a movement of labour from low-productive to high-productive occupations, the spatial manifestation of this process being rapid urbanisation. Such facile generalisations can be misleading in the Indian context. This is because the growth of employment in the organised manufacturing and formal tertiary sectors has been slow and selective. Much of the displaced labour from agriculture has sought absorption in the unorganised tertiary sectors in the urban economy. If, despite the low wage rate prevailing in this unorganised labour market, the share of the tertiary sector in the net national product has increased, it is because the growth of income in the organised tertiary sector both public and private, has been phenomenal. The inequality in income within the industrial and tertiary sectors has thus increased very significantly.

5.3.4 It is well known that the increase in the capital-labour ratio and the general scarcity of investible resources are inhibiting the growth of employment in the formal segments of the economy. Labour absorption, even at the subsistence wage rate, in various urban informal activities, on the other hand, is reaching saturation levels. There is thus not much hope for substantial transfer of workers from agriculture to non-agricultural sectors, unless the strategy of industrialisation changes in favour of producing mass consumption goods for which there is a growing demand and the production of which generally permits the use of labour-intensive technology.

5.4 *Seventh Five Year Plan and the Strategy for Urban Industrial Development*

5.4.1 The 'central concern' of the development strategy and the programmes of employment generation of the Seventh Five Year Plan has been 'removal of poverty'. The Plan envisages reduction

in the percentage of people below the poverty line at a much faster rate than in the past—from 39.9 to 28.2 and from 27.7 to 19.3 in rural and urban areas respectively during the plan period. This would call for a massive programme for additional employment generation to the tune of 40 million standard person-years, a substantial part of which will have to be in the rural areas. Various anti-poverty programmes are being 'designed to supplement and strengthen the favourable impact of faster agricultural growth on the level of living of the rural poor'. These are designed specifically to create additional employment opportunities in on-farm and off-farm activities and to provide infrastructural facilities and public amenities in the rural areas. The Plan recognises that the Major task ahead is to integrate various beneficiary oriented programmes, sectoral programmes and area development schemes into a consistent design of comprehensive development.

5.4.2 The Seventh Plan stresses the point that 'even with a high rate of industrial growth, the excess rural population cannot be fully absorbed in the organised industrial sector and additional employment has to be generated in rural areas through intensification of agriculture and village and rural industries, diversification of rural economic activity and a large programme of construction and capital formation.

5.4.3 The thrust of the development strategy for removal of poverty must, therefore, be on rural development and generation of employment in rural areas at a reasonable level of productivity. A shift in planning priority in favour of rural development is imperative also in view of the fact that the urban-rural income ratio in per capita terms has gone up significantly during 1951—81 as noted a little earlier. The ratio is projected to go up further to 3.34 by 1994/95 by the Task Forces on Housing and Urban Development set up by the Planning Commission, even with an optimistic assumption regarding the growth of agricultural income and rural industries. To contain the growing rural-urban inequality, both in terms of income and level of public utilities, it is important that an appropriate settlement strategy be designed and implemented. It is important that industrial employment is generated at a large number of growth centres—large villages and small towns—and the basic public amenities made available and accessible to the entire countryside through a network of these centres.

5.4.4 Two interrelated issues pertaining to the supply and demand sides of income generation in the rural areas become relevant in the context of the strategy of dispersed industrialisation. First, what kind of infrastructural components and industrial units can be located in small towns and central villages to

generate employment for the local population without compromising too much on the issue of economic efficiency? Second, what commodities and services would be demanded by the rural population when their incomes start rising and what could be the direct and indirect effect (through sectoral interdependencies) of this increase on the total production in different sectors of the economy? The success of the strategy of industrial dispersal would depend on how best the technological linkages among industries are transformed into spatial interdependencies. This implies that the strategy of dispersed industrialisation would necessitate the creation of a hierarchic settlement structure and government must play a major role in bringing about this optimal settlement hierarchy.

5.5 Impact of Demand Increase in Different Sectors on Agriculture

5.5.1 A recent study by Ghosh (1987), *Measurement of the Impact of Agricultural Output on the Market for Manufacture*, lends interesting insights into the nature of rural-urban interdependencies. The analysis in the study has been carried out within an input-output framework in order to capture the direct, indirect and induced effects of unit change in final demand in different sectors of the economy. A partially closed model, which treats the households dependent on agriculture and those dependent on manufacturing as two distinct sectors supplying labour to the economy, has been employed to estimate the impact coefficients. The analysis helps in identifying sectors with high agricultural income multipliers—sectors in which unit increase in final demand results in high increase (total) in agricultural income.

5.5.2 The study by Ghosh shows that agro-based industries like Sugar and Gur, Jute Textiles, Animal Husbandry, Vegetable Oil, Other Food Products, Cotton Textiles, Leather and Leather Products, and Forestry generate high agricultural income. This is evidently because the inputs for these industries come from agriculture and also because a high proportion of the income earned by the workers in these industries is spent on food and other products of agriculture.

5.6 Impact of Agricultural Income on Other Sectors

5.6.1 The same framework with some variation in the model can be used to determine the impact of unit increase in agricultural income on the production levels of different sectors. It is interesting that the industries identified in the preceding section (5.5) as having strong backward (supply) linkages with agriculture also turn up as having significant forward (demand) linkages. The industries that top the list are 'Other Food Products, Cotton Textiles, Other Textiles, Sugar and Gur, Forestry and Animal Husbandry. The results confirm that agro-based industries

are largely affected by the demands from agricultural income earners'.

The demand linkages of agriculture with household based food-processing or other consumer goods industries is understandable. At the present level of standard of living in the country, much of the income from 'primary sector goes to satisfy unsatiated demands' from sectors mainly producing basic infra-structural services, public amenities, food, beverages and clothing.

A recent survey conducted by Hindusthan Lever Ltd. (1983) confirms this conclusion. It reveals that rural income has grown significantly during the late seventies and early eighties and that this has created demand for various types of food products and commodities for daily use. It is important to note that Hindusthan Lever already have about 3500 stockists located in towns with population up to 20,000 for distribution of their various consumption goods and are proposing to strengthen their rural marketing network on the basis of their market survey.

5.6.2 The study by Ghosh demonstrates that the biggest pressure of demand generated through agricultural income would be on infrastructural services. It is noted that a large share of the total demand created through increased agricultural income is claimed by 'railway, other transport and other services including medical, education, recreation etc.' Ghosh rightly observes that "it is somewhat strange that in the current discussion on the generation of demand from agriculture, this largest chunk has been generally overlooked". One can, therefore, argue that investments in infrastructural facilities serving small towns and rural areas, would have to be increased substantially as an input in the development process to meet the demands of the rural population generated through their increased income. The Seventh Plan does recognise the need for increased allocation of resources for the development of economic infrastructure and public services like the health, education, housing, sanitation etc. The Deputy Chairman of the Planning Commission notes in the Preface to the Seventh Plan document that 'because of their critical importance in sustaining the growth process, particular attention has been paid to raising the capability of the infrastructure and human resource development with substantial increases in the proportion of outlays for these two sectors, as compared to the Sixth Plan.'

5.6.3 A few manufacturing industries come third in order of importance in generation of demand for their products as a result of increase in agricultural income. Among these are man-made fibre, Chemicals' (including matches, inedible oil, etc.). Drugs and

Cosmetics and Non-metallic Mineral Products, that meet a substantial portion of the demand generated through increase in agricultural income. These industries, in their highly aggregated form, do not give an idea of the specific commodities for which demand goes up consequent on a rise in agricultural income. Using the disaggregated data for different commodities, one can argue that demand for commodities like clocks and watches, bicycles, soaps, pots and pans, kitchen utensils etc. have gone up in recent years in the rural areas. Industrial units producing these items do not generally gain much from economies of scale and could easily be located in small towns or central villages, provided adequate marketing support is made available to them.

5.6.4 One point that Ghosh study brings out quite sharply that the consumption pattern of city dwellers is different from that of the rural population. While increases in urban income can possibly support the growth of the modern industrial sector, the same is not true of increases in rural income. Consequently, a substantial rise in the income level of the rural population would invariably lead to major changes in the output mix of the industrial sector. A large majority of the currently stagnating industries producing semi-luxury items like electrical of electronic goods, cars, motorcycles, books and stationery, etc. are unlikely to get much demand support in the process of agricultural development.

5.7 One can thus conclude that, to ensure a sustained growth of the industrial sector together with substantial employment and income-generation in rural areas resulting in reduction of rural-urban inequality, it is important that the sectoral and spatial distributions of industries are modified. The emphasis must shift in favour of small-sector, household-based, mass-consumption goods that can be produced in a dispersed manner, without much capital investment. Luckily, most of these industries are highly labour-intensive and, therefore, meet the twin objectives of catering to rural demand and generating employment for the semi-skilled labourforce in the countryside. This seems to be the only viable strategy for attaining the objective of eradication of poverty in the next fifteen to twenty years. The Seventh Plan recognises the need for adopting this approach, observing that 'the increase in the spending power of poor households will lead to a more rapid expansion in the demand for mass consumption goods, most particularly foodgrains, clothing and shelter.' This strategy also requires that special attention be paid to increasing the production of foodgrains, edible oils, sugar, textiles, cooking fuel and the articles of mass consumption.'

6

Policy Perspectives

6.0 The conclusions derived from the statistical analysis in the various chapters of this study have been set out at the ends of the chapters, along with certain generalisations and their policy implications. A few specific recommendations emerging from this analyses in the context of evolving a national urbanisation policy are, however, given below.

6.1 The recent changes in the structure of the rural economy and the emergence and 'fast' growth of a large number of urban centres spread all over the country, as noted by the National Commission on Urbanisation (NCU) and the implications of which are discussed in Chapter III of the present study, should make the policy planners optimistic about the possibility of urban—industrial dispersal in India. The *Taskforce on Housing and Urban Development* did not consider any significant increase in manufacturing workforce in the rural areas as feasible and projected that the percentage of workers engaged in the secondary sector (in the rural areas) would go up from 6.5 per cent in 1981 to only 7 per cent in 2001. Correspondingly, the percentage of workers in the primary sector, was estimated, to go down from 83 per cent to 78 per cent during this period. The data thrown up by the 38th Round of the National Sample Survey reveals that the dependence of the workforce on agriculture in the rural areas was as low as 78 per cent in 1982/83 and the growth of the manufacturing sector was much faster than had been considered feasible. In fact, the process of sectoral diversification within the rural economy was much stronger than in the urban economy. It is, therefore, recommended that this process should be strengthened through dispersal of critical industrial infrastructure in small towns and large villages. This in turn would support the agrarian economy in the region and help the process of rural—urban transformation.

6.2 The proposal for 'harnessing the potential of all or some of the 555 fast-growing towns' is

welcome, but would be inadequate 'to bring about a desirable and healthy pattern of urbanisation', as has been proposed by the NCU. A few among the currently fast-growing towns do not have the minimum development potential and their growth during 1971—81 can be explained in terms of random or transient factors. There are, on the other hand, several centres with long-term growth potential that did not experience population growth above the national average during the seventies. A 'positive policy of intervention' must, therefore, have a larger canvass. The present study suggests that a set of about 2000 to 2500 towns, with less than one lakh population each, must be identified as nodes to receive infrastructural investment. The selection of the towns, identification of the infrastructural components to be provided, designing of the schemes etc., can be done appropriately only at the state level.

6.3 Power (electric connections), railway station, bus route and administrative status of a settlement (as district or taluka headquarters) emerge as significant infrastructural parameters promoting urban growth. It is, therefore, important that in the determination of the growth potential (to be used in the selection of the nodes), these factors are given due weightage. The infrastructural provision, however, would have to be different in towns in different regions, depending on their resource base, labour force structure and other socio-economic factors.

6.4 Industrialisation goes hand in hand with urban growth in the case of class I cities (other than the metropolitan cities) in India. It was noted that, in several large cities and towns, population growth has slowed down due to sluggish growth of the manufacturing sector, which can be attributed to faulty policies of the central, state and local governments. It is indeed true that the organised industrial sector will continue to get concentrated in large towns and their immediate hinterland. It should, therefore, be possible to identify one hundred new centres of future

industrial (medium and large industries) concentration, spread all over the country, selected so as to ensure that each has a population between fifty thousand and one lakh and that none is in close proximity to a developed industrial centre, as was proposed by the National Commission for the Development of Backward Areas (NCDBA)). Drastic, and ad hoc, measures to take industries out to small and medium towns might adversely affect the overall growth of the industrial sector. It is, therefore, suggested that massive subsidies in land, infrastructure and public amenities enjoyed by the people and industries in large cities should be withdrawn in a phased manner, so that the industrialists find it economic to locate their units in the proposed industrial centres in backward regions to take advantage of capital subsidy and infrastructural facilities available there.

6.5 The metropolitan cities will continue to receive a large proportion of the rural migrants, although this would slow down a bit, as indicated by the recent trend. It is indeed true that these cities are increasingly acquiring a residential character, with rapid expansion of trade (retail) and commerce and other tertiary activities and, as a result, are not critically dependent on the growth of the organised industries. The basic impetus to their growth comes from tertiary activities, belonging mostly to the unorganised sector. These cities must receive grants from the central or state governments to improve their infrastructure and civic amenities in slum areas and low-income localities. It must, however, be mentioned that, despite much noise and the demand made for more funds for these cities, the problem here is not so much of the average level of the facilities but their distribution. Major programmes for improvement in the living environment, including water supply, sanitation, medical and educational facilities, must be undertaken. These programmes should, however, demonstrate how they propose to improve the availability or access to these facilities for the poor, to qualify for financial help from the central or state government.

6.6 The fast growth of small towns and emergence of new towns in the backward regions is the most important feature of urbanisation in the country. It is also important to note that the growth rates of these towns have been highly unstable over time and these have shown high cross-sectional variability. The correlation results indicate that it is not the growth of manufacturing but that of trade and commerce and tertiary activities, associated with district or taluka administration, that explain the growth of these towns during the sixties and seventies. 'Harnessing the potential' of these towns is, therefore, possible only if, together with the tertiary sector, the growth of the

manufacturing sector is also promoted. Several macro and micro-level studies reveal that there is a big demand for a number of non-agricultural commodities like soap, matches, rope, utensils, agricultural implements, cycle parts and different types of services in the rural areas, together with the demand for economic infrastructure and public amenities like medical and educational facilities. The demand is likely to grow in future and several large industrial groups, including some of the multinationals, are entering the rural market to tap the demand for basic consumer goods. The production processes in case of most of these commodities do not benefit much from economies of scale and, with reasonable investment in critical infrastructures and some amount of technical and marketing support in the initial years, many of these items can be produced locally. Unless the Integrated Rural Development Programme (IRDP) and other employment generation schemes in the Seventh Five Year Plan are backed by an industrialisation policy in favour of these growth centres, much of the income generated within the rural economy will be drained out and the programmes will fail to make any long-term impact on the region.

6.7 The fast-growing small and medium towns are in an extremely precarious position with regard to municipal finance. There are some 476 towns with population below one hundred thousand in 1981 that have experienced a growth rate of over fifty per cent during the sixties or the seventies. This rapid demographic expansion has put immense pressure on their limited infrastructure and public amenities, resulting in miserable living condition in many of these towns which will restrict their population absorptive capacity in future years. It is, therefore, recommended that the Central Government should transfer substantial funds to the States, through the Finance Commission or the Planning Commission, to be passed down to the local governments for their current as well as capital expenditure.

6.8 Housing for the poor must be taken up as a major area of intervention by government for changing the pattern of urban growth. In large cities, government should initiate major house-construction programmes, both for rental and ownership purposes, for low-income and economically weaker sections of population, through agencies it sponsors or controls. Individuals and private builders should be encouraged to participate in house construction activity but not in land speculation. Government, therefore, should create public-sector organisations that can procure and disburse land within and around the metropolitan cities and keep control over prices and rents of residential and non-residential premises belonging to the private

sector. It is indeed true that our experience of public sector involvement in housing has not been very encouraging but that is no reason why private entrepreneurs should be allowed to amass monumental profits through land speculation, in a situation wherein the value of metropolitan land is increasing very fast due to massive government investment and subsidies.

In the case of small and medium towns that, on an average, enjoy a low level of governmental subsidy in basic social amenities, the problem of land speculation is not very serious. Here, an appropriate envi-

ronment should be created to encourage participation of the private and cooperative sectors in house building activity, with government control over housing for the urban poor. A certain amount of subsidy for well-identified groups of poor should not be ruled out, in large as well as in small towns.

6.9 Lastly, we recommend that the allocation for urban development and housing, as a proportion to the total public sector outlay, be increased substantially to make meaningful intervention in the process of urbanisation possible.



TABLE I

Number of Urban Centres in Different Censuses, 1951-81, in Selected States of India

State	1951	1961	1971	1981
1. Andhra Pradesh	278	212	207	234
2. Bihar	102	132	161	179
3. Gujarat	231	167	200	220
4. Haryana	62	61	65	77
5. Himachal Pradesh	29	29	35	46
6. Karnataka	286	219	230	250
7. Kerala	94	92	88	85
8. Madhya Pradesh	194	208	232	303
9. Maharashtra	373	239	257	276
10. Orissa	39	60	78	103
11. Punjab	111	107	106	134
12. Rajasthan	220	141	151	195
13. Uttar Pradesh	462	244	293	659
14. West Bengal	84	119	134	130
INDIA	2,844	2,330	2,531	3,245

- NOTES : 1. The figures for India exclude Assam and Jammu & Kashmir for which census was not conducted together with the other States in 1981.
2. States with populations of less than four million have been excluded from the study.
3. Urban agglomerations have been considered as single urban units and, consequently, the figures reported in the table for the years 1951, 1961 and 1971 are lower than the corresponding figures in respective census volumes.

TABLE II

Growth Rates of Population of Urban Centres in Different Size-Categories during 1961-71

State	I	II	III	IV	V	VI	All Urban
1. Andhra Pradesh	41.38	19.12	31.21	27.74	28.18	14.98	33.28
2. Assam	45.00	37.39	56.61	35.74	46.90	49.62	47.65
3. Bihar	24.74	21.40	20.87	33.50	43.50	27.04	26.70
4. Gujarat	45.03	28.43	28.22	21.23	24.80	18.14	34.09
5. Haryana	-2.89	31.80	41.59	41.71	32.72	33.46	33.47
6. Himachal Pradesh	-	-	29.98	12.55	43.37	14.95	25.17
7. Jammu & Kashmir	47.73	-	29.81	39.42	42.53	41.82	45.06
8. Karnataka	39.92	24.51	25.61	25.59	27.39	22.58	30.81
9. Kerala	31.28	-5.90	5.72	34.65	-1.70	66.14	14.69
10. Madhya Pradesh	45.78	51.11	41.63	38.86	31.77	40.70	41.66
11. Maharashtra	41.25	41.47	28.93	29.12	30.01	23.46	37.59
12. Orissa	40.63	38.47	71.02	43.88	40.93	59.80	47.48
13. Punjab	32.55	32.80	15.55	21.09	21.73	21.04	24.83
14. Rajasthan	41.75	35.83	32.68	26.21	30.17	36.63	34.69
15. Tamil Nadu	34.55	35.49	33.62	34.45	1.78	24.64	31.75
16. Uttar Pradesh	25.38	25.13	26.26	22.85	30.25	76.63	25.72
17. West Bengal	15.23	26.66	42.96	26.89	24.92	32.79	32.06
URBAN INDIA	35.10	31.86	30.31	29.38	30.19	32.68	23.51
Growth rate of urban India during 1951-61	33.28	22.48	24.23	21.72	18.26	25.32	26.30

TABLE III
State-wise Distribution of Urban Centres and Urban Populations in India, 1971 and 1981

State	Urban Centres per 1,000 sq. km	Urban centres per 10,00,000 rural popu- lation	% of urban to rural popu- lation 1971	% of urban to rural popu- lation 1981	Growth rate of population in existing urban centres, 1971-81
1. Andhra Pradesh	0.81	6.38	23.94	30.28	44.52
2. Assam	0.74	5.43	9.73	—	—
3. Bihar	1.16	3.98	11.11	14.23	51.95
4. Gujarat	1.10	11.45	39.04	45.10	42.92
5. Haryana	1.47	7.86	21.45	28.14	55.37
6. Himachal Pradesh	0.65	11.18	7.52	8.37	19.02
7. Jammu & Kashmir	0.20	11.98	22.83	—	—
8. Karnataka	1.28	11.05	32.11	40.68	51.62
9. Kerala	2.26	4.92	19.39	23.12	27.34
10. Madhya Pradesh	0.56	7.17	19.46	25.48	50.22
11. Maharashtra	0.94	8.33	45.28	53.91	39.57
12. Manipur	0.36	8.59	15.19	35.95	55.07
13. Meghalaya	0.27	6.94	17.02	21.99	40.99
14. Nagaland	0.18	6.45	11.05	18.40	—
15. Orissa	0.52	4.03	9.18	13.40	51.62
16. Punjab	2.14	10.45	31.12	38.55	37.45
17. Rajasthan	0.46	7.40	21.41	26.48	47.74
18. Tamil Nadu	3.37	15.28	43.38	49.21	28.88
19. Tripura	0.57	4.30	11.65	12.34	31.17
20. Uttar Pradesh	1.10	4.28	16.31	21.97	35.99
21. West Bengal	2.54	6.69	32.89	36.04	29.14
INDIA	0.95	7.12	24.85	31.12	39.56

NOTE : Growth rate in the last column has been calculated by taking only those settlements that were identified as urban in 1971. The towns declassified in 1981 are also excluded as their population for the year 1981 are not available.

TABLE IV
Statewise Growth Rates of Urban Population

State	(per cent per year)					
	All Towns			Towns above 20,000 only		
	1951—61	1961—71	1971—81	1951—61	1961—71	1971—81
1. Andhra Pradesh	1.5	2.9	4.0	3.5	3.9	5.0
2. Bihar	4.1	3.7	4.4	4.8	4.1	5.4
3. Gujarat	1.8	3.5	3.5	3.6	3.6	4.2
4. Haryana	3.1	3.1	4.8	4.4	3.9	5.2
5. Karnataka	1.7	3.1	4.2	3.5	3.8	5.3
6. Madhya Pradesh	4.0	3.9	4.6	4.6	5.0	4.8
7. Maharashtra	2.0	3.5	3.4	3.6	4.0	3.8
8. Orissa	6.5	5.2	5.3	7.4	7.9	6.0
9. Punjab	2.6	2.3	3.7	3.9	2.6	4.1
10. Rajasthan	1.1	3.3	4.6	2.8	4.3	5.4
11. Tamil Nadu	2.1	3.3	2.5	6.1	4.3	2.9
12. Uttar Pradesh	0.9	2.7	4.9	2.9	2.9	3.9
13. West Bengal	3.1	2.5	2.8	3.3	2.7	3.1
INDIA	2.33	3.26	2.85	3.59	3.85	4.18

NOTES : 1. The table includes all states with total population greater than ten million in 1971 but excludes Kerala and Assam.
2. The growth rates for the country in the last row excludes the states of Assam and Jammu & Kashmir.

SOURCE : Task Forces on Housing and Urban Development : Report of the Task Force on Planning of Urban Development, Planning Commission, Government of India.

TABLE V

Select Demographic Characteristics of the Districts and the Regions Studied by the National Institute of Urban Affairs Project (1984)

District	Growth rate of total population (1971-81) (N)	Growth rate of urban population (1971-81) (N)	Level of urbanisation		Density of total popu- lation (1981)
			1971	1981	
STUDY AREA I	27.84	50.20	21.60	25.37	387
Ambala	+27.47	+34.42	31.39	31.10	365
Kurukshetra	+30.21	+38.89	15.52	16.56	300
Patiala	+28.95	+46.20	26.12	29.61	341
Sangrur	+22.56	+38.08	20.31	22.88	275
Saharanpur	+30.12	+48.89	23.50	27.07	478
Muzaffarnagar	+26.97	+98.16	13.86	21.63	548
STUDY AREA II	23.85	75.82	4.92	6.99	617
Gorakhpur	+24.93	+66.91	7.90	10.56	650
Deoria	+24.00	+78.46	2.96	6.64	640
Paschim Champaran	+23.98	+23.37	7.38	7.35	376
Purba Champaran	+24.11	+67.09	3.45	4.65	612
Gopalganj	+22.94	+131.29	2.65	4.98	670
Siwan	+21.61	+51.19	3.54	4.41	801
STUDY AREA III	29.58	54.31	28.29	33.69	187
Thane	+46.38	+79.27	36.23	44.38	349
Pune	+30.97	+48.15	41.84	47.33	266
Ahmadnagar	+19.48	+39.93	11.08	12.98	159
Nasik	+26.01	+36.74	28.64	31.08	192
Aurangabad	+23.82	+63.78	16.06	18.76	150
STUDY AREA IV	20.85	70.71	13.12	18.53	149
Raipur	+17.67	+63.00	12.44	17.23	145
Durg	+28.64	+100.59	20.40	31.80	221
Rajnandgaon	+17.50	+47.98	9.82	12.36	105
Bilaspur	+20.94	+54.70	10.82	13.84	148

TABLE VI

Average of the City/Town Growth-rates in Different Size-Classes 1961—71(a) and 1971—81(b)

States		N		N	
		I	II	III	IV V & VI
Andhra Pradesh	a	37.10	30.49	33.41	30.03 31.52
	b	45.98	45.64	43.24	46.38 37.78
Bihar	a	44.40	20.38	24.81	27.45 34.51
	b	59.57	41.43	46.77	39.31 62.40
Gujarat	a	46.08	28.75	27.75	27.49 27.82
	b	45.97	30.46	32.75	25.82 24.88
Haryana	a	2.41	44.43	35.99	40.36 29.98
	b	93.38	52.63	39.58	32.95 44.72
Himachal Pradesh	a	—	29.98	—	10.59 25.44
	b	—	27.29	—2.49	24.16 24.15
Karnataka	a	30.63	41.10	32.56	26.85 29.49
	b	44.82	44.11	36.07	32.32 35.27
Kerala	a	48.86	19.40	15.58	57.57 97.61
	b	13.99	40.53	20.14	92.45 19.07
Madhya Pradesh	a	47.70	38.60	42.19	37.24 34.11
	b	46.36	42.66	50.25	34.39 39.08
Maharashtra	a	44.77	42.54	32.10	30.07 20.56
	b	44.70	34.93	30.49	26.54 27.88
Orissa	a	43.98	54.50	61.05	46.11 36.52
	b	68.55	46.72	48.45	41.46 54.99
Punjab	a	33.40	32.61	18.53	17.62 21.27
	b	39.97	47.18	33.27	33.22 41.84
Rajasthan	a	43.02	35.47	35.26	28.43 28.98
	b	47.69	38.75	44.38	41.25 34.63
Tamil Nadu	a	45.25	30.13	34.17	30.72 22.80
	b	30.87	24.92	23.01	17.79 19.70
Uttar Pradesh	a	24.39	28.94	28.90	26.03 27.47
	b	37.88	38.70	41.27	38.09 41.68
West Bengal	a	30.16	30.11	48.37	31.26 28.10
	b	33.50	31.02	46.06	53.67 45.33

TABLE VII

Standard Deviation of City/Towns Growth rates in Different Size-Classes 1961-71(a) and 1971-81(b)

State		N		N		V&VI
		I	II	III	IV	
Andhra Pradesh	a	15.77	15.71	19.13	16.62	24.43
	b	16.81	16.67	21.00	25.90	25.18
Bihar	a	33.65	10.45	19.73	16.99	32.56
	b	34.05	8.83	25.35	20.31	45.95
Gujarat	a	93.31	64.11	12.26	11.65	20.64
	b	17.67	11.26	28.48	12.62	13.79
Haryana	a	0	27.01	12.39	23.18	17.59
	b	83.86	12.12	17.60	14.47	63.55
Himachal Pradesh	a		29.98	—	10.59	25.44
	b	—	0	0	9.94	33.41
Karnataka	a	30.68	41.10	32.56	26.85	29.49
	b	14.81	11.33	18.01	14.75	42.73
Kerala	a	68.86	19.40	15.58	57.57	97.61
	b	14.70	76.64	23.96	79.18	0
Madhya Pradesh	a	47.70	38.60	42.19	37.24	34.11
	b	21.60	11.51	25.01	16.50	20.48
Maharashtra	a	44.77	42.54	32.10	30.07	30.56
	b	19.34	17.37	16.35	20.12	33.60
Orissa	a	43.98	54.50	61.05	46.11	36.52
	b	29.63	7.62	22.24	19.10	79.28
Punjab	a	33.40	32.61	18.53	17.62	21.27
	b	6.45	20.46	12.50	21.90	44.46
Rajasthan	a	43.02	35.47	35.26	28.43	28.98
	b	10.04	10.62	17.90	25.12	16.58
Uttar Pradesh	a	24.39	28.94	28.90	26.03	27.47
	b	22.18	12.94	25.00	16.84	32.39
Tamil Nadu	a	45.25	30.13	34.17	30.72	22.80
	b	10.59	13.26	12.80	14.16	34.39
West Bengal	a	30.16	30.11	48.37	31.26	28.10
	b	13.87	15.87	43.22	64.09	37.67

TABLE VIII

Number of Towns Growing at the Rate of more than 50% during both 1961-1971 and 1971-81

Class	N		N		V	VI	Total
	I	II	III	IV			
States							
Andhra Pradesh	2	4	9	4	1	N	20
Bihar	3	4	3	6	3	—	19
Gujarat	2	1	2	5	N	—	10
Haryana	N	N	2	2	—	—	4
Himachal Pradesh	—	—	—	—	2	3	5
Karnataka	1	2	4	4	—	2	13
Kerala	—	—	4	—	—	—	4
Madhya Pradesh	2	11	4	9	1	1	28
Maharashtra	7	3	7	3	1	1	22
Orissa	3	2	5	3	—	—	1
Punjab	1	—	1	—	1	—	3
Rajasthan	2	1	2	5	1	—	11
Tamil-Nadu	1	1	1	—	—	—	3
Uttar Pradesh	1	1	4	3	6	1	16
West Bengal	3	—	2	—	—	—	5
TOTAL	28	30	50	44	17	8	177

TABLE IX

Number of Towns Growing at the Rate of more than 50% during 1971-81

Class	N		N		V	VI	Total
	I	II	III	IV			
States							
Andhra Pradesh	10	17	26	8	1	N	62
Bihar	8	10	13	16	3	—	50
Gujarat	3	5	3	7	N	—	18
Haryana	2	N	3	3	—	1	9
Himachal Pradesh	N	—	N	N	3	3	6
Karnataka	7	5	11	5	2	2	32
Kerala	—	1	5	—	—	—	6
Madhya Pradesh	3	15	8	19	2	1	48
Maharashtra	9	3	8	6	1	1	28
Orissa	3	4	7	6	1	—	21
Punjab	2	—	8	2	5	—	17
Rajasthan	4	3	13	10	1	1	32
Tamil Nadu	1	2	4	1	1	—	9
Uttar Pradesh	5	11	12	14	8	2	52
West Bengal	5	10	8	9	1	—	33
TOTAL	62	76	129	106	29	11	413

TABLE X
Number of Towns Growing at the Rate of less than 10 % during Both 1961N—71 and 1971N—81

Class	I	II	III	IV	V	VI	Total
State							
Andhra Pradesh	N	N	1	1	1	1	4
Bihar	—	—	N	N	N	N	N
Gujarat	—	—	—	2	4	—	6
Haryana	—	—	—	—	—	—	—
Himachal Pradesh	—	—	—	—	—	2	2
Karnataka	—	—	1	1	—	1	3
Kerala	—	—	2	—	—	—	2
Madhya Pradesh	—	—	—	—	2	—	2
Maharashtra	—	—	—	3	4	1	8
Orissa	—	—	—	—	1	—	1
Punjab	—	—	1	1	—	—	2
Rajasthan	—	—	1	—	—	—	1
Tamil Nadu	—	—	—	3	3	2	8
Uttar Pradesh	—	—	—	2	1	2	5
West Bengal	—	—	—	1	1	—	2
TOTAL	—	—	6	14	17	9	46

TABLE XI

Number of Towns Growing at the Rate of Less than 10 % during 1971N—81

Class	I	II	III	IV	V	VI	Total
State							
Andhra Pradesh	N	N	2	3	2	2	9
Bihar	—	—	N	N	2	N	2
Gujarat	—	—	1	1	6	1	9
Haryana	—	—	—	1	—	—	1
Himachal Pradesh	—	—	1	1	—	6	8
Karnataka	—	—	1	3	3	3	10
Kerala	2	3	11	1	—	—	17
Madhya Pradesh	—	—	1	—	2	—	3
Maharashtra	—	—	4	11	4	5	24
Orissa	—	—	—	—	1	—	1
Punjab	—	—	2	4	1	2	9
Rajasthan	—	—	1	1	—	—	2
Tamil Nadu	—	4	7	24	14	3	52
Uttar Pradesh	—	—	2	3	3	2	10
West Bengal	—	—	—	3	1	—	4
TOTAL	2	7	33	56	39	24	161

TABLE XII

Percentage of Cities/Towns Growing at the Rate of More than 50% During 1961N-71 (a) and 1971N-81(b)

State		Class					Total
		I	II	III	IV	V&VI	
Andhra Pradesh	a	18.18	12.50	25.00	7.58	10.25	10.40
	b	53.84	35.29	35.71	30.26	15.00	30.54
Bihar	a	22.22	0	10.34	6.82	10.00	9.23
	b	63.64	25.00	31.71	18.18	45.57	32.67
Maharashtra	a	7.69	50.00	16.67	12.20	12.50	13.85
	b	33.33	25.00	20.00	6.90	11.11	11.89
Kerala	a	75.00	0	10.52	45.45	—	25.00
	b	0	0	3.57	71.43	—	12.77
Karnataka	a	16.66	33.33	13.79	6.76	8.33	9.90
	b	33.33	44.44	21.05	11.70	8.70	14.86
Himachal Pradesh	a	0	0	0	33.33	28.57	28.00
	b	0	0	0	0	17.86	14.29
Haryana	a	0	12.5	22.22	35.71	11.54	18.97
	b	50.00	9.25	15.38	23.07	13.04	21.67
Madhya Pradesh	a	12.5	20.00	31.25	22.64	16.33	20.41
	b	27.27	25.00	44.74	13.43	15.46	20.89
Gujarat	a	16.67	0	5.26	6.38	7.41	8.92
	b	50.00	5.88	18.92	3.08	6.35	9.47
Punjab	a	25.00	0	0	0	5.88	2.58
	b	25.00	14.29	12.5	18.75	13.15	15.24
Orissa	a	0	66.67	37.5	47.37	20.83	34.54
	b	50.00	50.00	17.85	14.28	25.81	26.32
Rajasthan	a	33.33	0	13.04	7.55	12.72	11.35
	b	42.86	14.28	22.58	20.00	17.04	20.53
Tamil Nadu	a	40.00	10.53	8.16	10.00	8.20	10.50
	b	20.00	3.70	3.51	3.70	6.52	4.42
Uttar Pradesh	a	0	6.25	1.96	2.63	8.23	4.49
	b	13.63	15.00	20.89	14.63	27.38	16.36
West Bengal	a	0	0	25.93	13.79	15.63	15.69
	b	20.00	12.5	20.00	2.78	30.43	23.64
INDIA	a	22.55	14.17	12.93	11.56	12.65	12.95
	b	32.41	18.96	19.26	15.09	17.34	18.07

NOTE : All-India figures are computed, excluding the States of Assam and Jammu & Kashmir

TABLE XIII

Percentage of Cities/Towns Growing at the Rate of Less than 10% During 1961N—71 (a) and 1971N—81(b)

State	Class					
	I	II	III	IV	V&VI	Total
Andhra Pradesh	a	0	25.00	12.00	4.54	10.26
	b	0	0	1.78	3.94	12.20
Bihar	a	0	25.00	13.79	6.81	15.00
	b	0	0	1.82	2.86	1.33
Maharashtra	a	0	0	3.66	9.09	4.76
	b	0	0	6.66	12.64	15.87
Kerala	a	0	25.00	21.05	0	12.50
	b	20.00	42.86	42.86	14.26	0
Karnataka	a	16.66	0	3.45	8.11	5.95
	b	0	0	2.63	5.32	5.80
Himachal Pradesh	a	0	0	0	66.66	47.61
	b	0	0	100	0	39.29
Haryana	a	100.00	25.00	0	7.14	3.85
	b	25.00	0	0	33.33	0
Madhya Pradesh	a	0	0	3.12	5.66	3.06
	b	0	0	0	14.28	3.09
Gujarat	a	0	0	5.26	8.51	11.11
	b	0	0	5.41	1.54	9.52
Orissa	a	0	0	0	5.26	20.00
	b	0	0	0	0	3.23
Punjab	a	0	0	25.00	20.00	17.65
	b	0	0	12.5	12.5	7.89
Rajasthan	a	0	0	8.70	13.20	14.55
	b	0	0	2.23	1.54	0
Tamil Nadu	a	0	0	0	10.00	16.39
	b	0	3.70	7.02	20.99	60.87
Uttar Pradesh	a	5.88	0	1.96	3.95	7.06
	b	0	0	2.99	3.66	4.76
West Bengal	a	50.00	0	11.11	13.79	15.62
	b	20.00	0	0	8.33	4.35
INDIA	a	4.90	5.83	6.92	7.70	11.25
	b	2.06	2.29	5.69	6.79	11.00

Note : All-India figures are computed, excluding the States of Assam and Jammu & Kashmir

TABLE XIV
Average Value of the Demographic and Economic Indicators for Towns in Fast, Medium and Slow Growth Categories

Growth Category	Growth Rate		Percentage of Workers in 1971 as										Male partici-		No. of com- modities manu- factured
	1961N-71	1971N-81	Culti- vators	Agril. labour- ers	HH Man- industry	Non HH Man Industry	Const- ruction	Trade and Comm.	Other services	Rate 1971	10	11			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A. Fast Growth :															
(Growth above 50%)															
1. Class I (Large towns or cities)	.	.	61.01	63.23	3.41	3.55	3.91	23.06	4.22	21.12	22.25	48.51	3.05		
2. Class II & III (medium towns)	.	.	61.25	63.20	9.42	8.11	3.34	14.95	3.46	19.91	20.70	48.52	2.67		
3. Class IV, V & VI (small towns)	.	.	53.44	65.68	12.20	9.01	5.67	11.42	5.33	19.31	21.40	49.71	2.44		
TOTAL	.	.	58.53	66.60	9.46	7.72	4.72	14.92	14.21	19.88	21.17	48.93	2.67		
B. Medium Growth															
(between 10 to 50%)															
1. Class I	.	.	30.64	31.96	3.96	2.91	4.44	18.96	3.23	21.54	21.41	48.68	2.92		
2. Class II & III	.	.	32.01	38.28	8.58	7.90	4.61	11.66	3.11	18.86	19.32	46.61	2.63		
3. Class IV, V & VI	.	.	28.01	29.93	16.09	11.73	6.01	8.54	2.67	17.35	18.89	47.91	2.45		
TOTAL	.	.	30.13	33.89	11.11	8.83	5.18	11.43	2.94	18.59	19.42	47.44	2.61		
C. Slow Growth															
(Less than 10%)															
1. Class I	.	.	4.37	21.53	3.61	5.74	3.88	17.05	2.99	24.23	25.22	49.60	3.20		
2. Class II & III	.	.	16.04	24.65	8.62	8.78	5.08	15.10	3.79	19.83	21.12	48.08	2.74		
3. Class IV, V & VI	.	.	6.10	18.50	13.68	11.40	6.98	11.01	3.79	16.57	20.94	48.95	2.53		
TOTAL	.	.	8.46	20.04	12.26	10.64	6.46	12.11	3.77	17.50	21.06	48.74	2.61		
Aggregative Level															
1. Class I	.	.	49.82	52.38	3.58	3.45	4.06	21.62	3.88	21.47	22.13	48.60	3.02		
2. Class II & III	.	.	47.56	54.59	9.10	8.15	4.51	14.20	3.42	19.64	20.41	47.97	2.67		
3. Class IV, V & VI	.	.	28.87	38.91	13.67	10.59	6.27	10.62	4.12	17.77	20.66	49.01	2.48		
TOTAL	.	.	39.18	47.09	10.57	8.71	5.27	13.38	3.79	18.97	20.72	48.52	2.64		

Table XV
Average Value of the Infrastructural Indicators for Towns in Fast, Medium and Slow Growth Categories in 1971

Average distance (km.) from their nearest										
Road length (kms.)		Domestic Ind. and Elect. connec- tions		Banks Comm. etc.		City	State H. Q.	District H. Q.	Sub-div. H. Q.	Bus Station Route
A. Fast Growth (above 50%)										
1. Class I (Large Towns).	1.48	93.40	21.70	.44	109.85	325.06	23.94	2.57	2.85	00
2. Class II & III (Medium towns)	1.22	58.63	21.52	.51	101.03	306.91	52.83	12.49	12.28	03
3. Class IV, V & VI (Small towns)	3.43	140.32	51.31	1.05	111.83	343.12	59.84	22.95	27.57	10
TOTAL	2.02	91.41	31.59	.67	106.04	322.04	51.03	14.63	16.15	.05
B. Medium Growth (between 10 to 50%)										
1. Class I	0.63	60.59	20.34	.41	83.47	262.86	39.53	4.81	.67	00
2. Class II & III	1.01	53.84	17.80	.56	83.97	311.50	53.35	19.03	9.24	10
3. Class IV, V & VI	1.81	56.46	19.88	1.15	96.96	331.54	53.26	28.45	17.89	02
TOTAL	1.30	55.90	19.04	.78	89.38	313.36	51.39	21.06	11.72	.05
C. Slow Growth (Less than 10%)										
1. Class I	0.55	62.61	24.61	.17	68.40	133.80	00	00	4.80	00
2. Class II & III	0.90	64.70	26.65	.54	98.06	328.23	55.85	13.82	9.82	00
3. Class IV, V & VI	1.72	94.44	24.56	.89	100.37	361.61	58.41	23.02	21.71	08
TOTAL	1.50	86.72	25.06	.79	99.23	349.41	56.73	20.38	18.54	.06
Aggregate Level										
1. Class I	1.19	82.54	21.46	.42	100.45	299.08	27.53	3.12	2.29	00
2. Class II & III	1.12	58.32	21.33	.53	96.36	311.07	53.39	14.31	11.17	04
3. Class IV, V & VI	2.38	102.92	33.33	1.01	103.97	348.00	57.81	24.18	23.10	07
TOTAL	1.71	81.66	26.88	.73	100.34	326.79	52.53	17.61	15.69	.05

TABLE XVI
Average Value of the Indicators for Municipal Finance, Civic Amenities and Others

Average Value of the Indicators for Municipal Finance, Civic Amenities and Others												
Growth categories	Per thousand persons (1971)											
	Income through taxes	Total receipt	Expend. on Gen. Admn.	Total Expenditure	Latrines, 1971 Per(1000 persons)	Water supply 1971 per (1000 persons)	Medical Index 1971	Edu. Index* 1971	Recreation Index* 1971	House-holds Per 100 houses 1971	Sex Ratio* 1981	Male Literacy 1981
A. Fast Growth (above 50%)												
1. Class I (Large towns)	59599	126274	14361	126610	157.08	161595	.16	1.02	.27	118.17	867.34	62.44
2. Class II & III(Medium towns)	42382	100220	14741	88807	109.97	2084735	.16	1.16	.37	115.32	891.27	61.01
3. Class IV, V & VI (small towns)	36061	92741	23220	91171	169.57	242169	.36	1.75	.61	114.75	857.01	60.69
TOTAL	43207	102047	17417	85760	137.32	1151228	.22	1.34	.43	115.55	875.96	60.11
B. Medium Growth (between 10 to 50%)												
1. Class I	197854	437258	35318	364661	585.89	90149	.10	1.07	.27	121.83	907.56	59.99
2. Class II & III	161285	58633	7544	61287	139.93	126257	.15	1.15	.37	115.14	911.18	57.24
3. Class IV, V & VI	27744	66262	11407	54733	140.24	57448	.24	1.47	.47	119.44	919.05	54.58
TOTAL	46505	114978	13030	101059	174.92	96269	.18	1.28	.40	117.97	914.00	56.49
C. Small Growth (below 10%)												
1. Class I	12819	20962	5058	22331	80.16	29983	.04	.99	.16	114.80	921.80	62.88
2. Class II & III	12730	22231	3676	23584	116.32	211514	.13	1.03	.39	110.82	957.56	62.32
3. Class IV, V & VI	30604	97479	16366	110842	104.72	1144924	.42	1.71	.63	111.41	951.85	59.25
TOTAL	25906	77824	13070	88055	106.94	871296	.34	1.53	.56	111.33	952.60	60.06
1. Class I	97974	212590	20086	191697	221.98	135819	.13	1.03	.27	119.11	881.33	61.74
2. Class II & III	31074	78014	11215	72115	118.99	1307983	.15	1.14	.37	114.63	905.57	60.25
3. Class IV, V & VI	31867	88690	17635	91005	135.85	552906	.36	1.67	.59	114.44	903.66	58.67
TOTAL	39614	99115	15194	95137	139.37	817906	.24	1.37	.45	115.05	904.28	59.73

* See 4.1.5 for explanation of these indices.

TABLE XVII

Average Value of the Demographic and Economic Indicators for District Sub-Divisions and Other Towns in Different Growth Categories

Growth Category	Growth Rate		Percentage of Workers in 1971 as						Male Partici- pation Rate 1971	No. of Com- modities Manu- factured	
	1961N-71	1971N-81	Cultiva- tors	Agril. Labour- ers	H. H. Industry	Non H. H. Industry	Cons- truction	Trade & commerce			Other Services
A. Fast Growth : (50% and above)											
1. District H. Q.	58.43	60.33	5.81	3.71	4.44	14.97	4.16	20.96	28.26	47.44	62
2. Sub-division H. Q.	57.38	59.44	11.12	8.42	4.30	13.60	3.77	20.89	20.90	48.72	63
3. Others	64.69	75.99	9.95	9.24	5.24	16.08	4.62	18.46	17.71	49.88	74
TOTAL	58.53	66.60	9.46	7.72	4.72	14.94	4.21	19.88	21.17	48.93	67
B. Medium Growth : (10- 50%)											
1. District H. Q.	31.20	36.98	4.01	3.31	4.71	13.56	3.38	20.88	27.12	48.15	57
2. Sub-division H. Q.	31.33	35.68	12.20	8.00	4.76	12.63	3.30	20.95	22.40	46.61	71
3. Others	29.15	31.93	12.96	11.13	5.55	10.10	2.60	16.60	15.29	47.63	91
TOTAL	30.13	33.89	11.11	8.83	5.18	11.43	2.94	18.59	19.42	47.44	78
C. Slow Growth : (Below 10%)											
1. District H. Q.	5.51	26.97	3.58	4.96	3.95	17.16	3.27	20.25	29.47	50.11	53
2. Sub-division H. Q.	14.02	20.73	9.44	8.24	4.51	10.28	4.69	20.19	26.03	48.42	92
3. Others	7.00	19.34	13.74	11.72	7.28	12.30	3.53	16.50	18.83	48.74	77
TOTAL	8.46	20.04	12.26	10.64	6.45	12.11	3.77	17.50	21.06	48.74	79
Aggregate Level:											
1. District H. Q.	47.30	51.70	5.17	3.69	4.41	14.77	3.89	20.89	28.06	47.83	60
2. Sub-division H. Q.	40.29	47.29	11.05	8.30	4.44	12.79	3.83	20.78	22.24	48.20	70
3. Others	35.95	45.51	12.03	10.58	6.03	13.29	3.74	17.32	17.50	48.93	79
TOTAL	39.18	47.09	10.57	8.71	5.23	13.38	3.79	18.97	20.32	48.52	73

TABLE XVIII

Average Value of the Infrastructural Indicators for District, Sub-Divisional and other Towns in Different Growth Categories.

Growth Categories	Road Length (kms)	Domestic Connections	Indus. and Conne- ction	Banks etc.	Average Distance from the Nearest					
					City	State H.Q. Capital	District H.Q.	Sub-div. H.Q.	Railway Station	Bus Route
A. Fast Growth : (50 % and above)										
1. District H. Q.	.86	72.67	26.08	.62	120.02	325.48	0.00	1.36	16.73	00.00
2. Sub-Division H. Q.	1.72	39.34	26.66	.63	109.25	320.41	66.18	00.00	18.04	00.00
3. Others	2.90	100.03	39.12	.74	96.04	321.64	64.49	34.03	14.24	0.11
TOTAL	2.02	91.41	31.59	.67	106.04	322.04	51.00	14.63	16.15	0.05
B. Medium Growth (10 to 50%)										
1. District H. Q.	1.38	69.78	21.83	.57	102.00	253.40	00.00	1.79	7.33	00.00
2. Sub-Division H. Q.	1.11	62.83	22.65	.71	99.40	311.67	64.71	00.00	12.48	.15
3. Others	1.37	47.55	16.23	.90	79.97	334.39	61.92	38.99	12.81	.02
TOTAL	1.30	55.90	19.04	.78	89.38	313.30	51.39	21.06	11.72	.05
C. Slow Growth : (Less than 10%)										
1. District H. Q.	1.67	150.42	28.12	.53	96.36	217.07	00.00	2.07	17.93	00.00
2. Sub-Division H. Q.	1.52	78.13	30.28	.92	132.67	343.38	59.43	00.00	19.68	.00
3. Others	1.52	84.80	23.27	.77	84.40	360.48	59.88	27.78	18.27	.08
TOTAL	1.50	86.72	25.06	.79	99.23	349.41	56.73	20.38	18.51	.06
Aggregate Level :										
1. District H. Q.	1.01	77.90	25.11	.60	113.52	298.43	00.00	1.53	14.37	00.00
2. Sub-Division H. Q.	1.55	83.92	26.44	.70	111.31	322.63	64.65	00.00	17.10	.03
3. Others	2.03	81.54	27.71	.79	89.78	338.24	62.26	32.94	15.28	.08
TOTAL	1.71	81.66	26.88	.73	100.34	326.79	52.53	17.61	15.69	.05

TABLE XIX

Average Value of the Indicators for Municipal Finance, Civic Amenities and Others for District, Sub-divisional and Other Towns in Different Growth Categories

Growth Categories	Per thousand persons (1971)				Latrines (1971) per 1000 persons)	Water Supply (1971) gallons per 1000 persons)	Medical index (1971)	Education index* (1971)	Recreation Index* (1971)	Household per 100 houses (1971)	Sex Ratio* (1981)	Male Literacy (1981)
	Receipt through tax	Total Income	Exp. on Gen. Admn.	Total Expenditure								
A. Fast Growth (50 % and above)												
1. District H.Q.	41786	107302	16475	112825	119.01	122792	.15	1.38	.33	120.75	856.26	62.48
2. Sub-division H.Q.	65927	151189	26361	135192	101.05	154081	.17	1.29	.40	115.59	889.96	61.2
3. Others	17986	44295	7817	40346	183.09	3206684	.31	1.37	.51	112.81	874.22	60.30
TOTAL	43207	102047	17417	95760	137.32	1151228	.22	1.37	.43	115.55	875.96	61.11
B. Medium Growth												
1. District H. Q.	70201	206126	24230	196588	180.14	75842	.11	1.16	.32	123.81	883.79	61.51
2. Sub-division H. Q.	104565	240356	25665	207766	314.38	175911	.16	1.46	.37	113.97	893.69	55.74
3. Others	4961	11085	1994	10011	101.29	57941	.22	1.22	.44	117.87	934.66	54.85
TOTAL	46505	114978	13030	101059	174.92	96269	.18	1.28	.40	117.87	914.00	56.49
C. Slow Growth												
1. District H. Q.	54639	88892	20689	87584	97.25	59244	.16	1.26	.33	105.57	918.07	52.42
2. Sub-division H. Q.	64127	157695	31841	207267	102.68	1946468	.20	1.72	.61	112.05	911.92	62.21
3. Others	11568	51959	6709	50755	108.87	551142	.40	1.50	.56	115.52	967.22	59.24
TOTAL	25906	77824	13070	88055	106.94	871296	.34	1.53	.56	111.33	952.60	60.06
D. Aggregative Level												
1. District H.Q.	50269	131949	18844	132975	133.87	105056	.14	1.31	.33	120.39	868.15	62.48
2. Sub-division H. Q.	74222	162214	27163	162751	151.27	465652	.17	1.41	.43	114.60	894.72	60.19
3. Others	12056	38362	5824	36138	137.26	1485270	.32	1.38	.51	113.61	921.33	58.59
TOTAL	39614	99115	15194	95131	139.37	817906	.24	1.37	.45	115.05	904.28	59.73

*See 4.1.5 for explanation of these indices.

TABLE XX

Average Value of the Demographic and Economic Indicators for Towns with and without Railway Connections in Different Growth Categories

Growth Categories		Growth Rate		Percentage of Workers in 1971 as					Male Parti- cipation Rate 1971	No. of Commo- dities manu- factured
		1961-71	1971-81	Cultiva- tors	Agri- Labour- ers	H.H. Indus- try	Non HH Indus- try	Trade and com- merce	Other services	
A. Fast Growth (Above 50%)										
1. With Railway Stn.		57.04	65.73	7.94	6.61	4.53	17.72	21.29	21.18	2.77
2. Without Railway Stn.		63.84	67.96	11.88	9.52	5.01	10.58	17.68	21.5	2.46
TOTAL		58.53	66.60	9.46	7.72	4.72	14.94	19.88	21.17	2.67
B. Medium Growth (Between 10-50%)										
1. With Railway Stn.		30.98	33.84	8.13	6.29	4.59	13.01	18.48	20.52	2.72
2. Without Rly. Stn.		28.98	33.96	15.21	12.31	5.97	9.27	18.74	17.93	2.45
TOTAL		30.13	33.89	11.11	8.83	5.18	11.43	18.59	19.42	2.61
C. Slow Growth (Less than 10%)										
1. With Railway Stn.		7.86	23.05	10.30	10.32	5.08	12.92	19.64	22.83	2.60
2. Without Rly. Stn.		8.92	17.79	13.74	10.89	7.48	11.50	16.07	19.75	2.61
TOTAL		8.46	20.04	12.26	10.64	6.46	12.11	17.50	21.06	2.61
Aggregative Level										
1. With Railway Stn.		41.09	49.57	8.46	7.23	4.65	15.62	20.22	21.33	2.73
2. Without Rly. Stn.		36.79	43.99	13.26	10.62	6.04	10.58	17.44	19.96	2.50
TOTAL		39.18	47.09	70.57	8.71	5.27	13.38	18.97	20.72	2.64

TABLE XXI

Average Value of the Infrastructural Indicators for Towns with and without Railway Connections in Different Growth Categories

Growth Categories	Road Length (Km.)	Domestic Elect. Connections	Indus. and Comm. Connections	Banks etc.	Average Distance from their nearest										
					City	State H.Q.	District H.Q.	Sub-div. H.Q.	Railway Bus Route						
A. Fast Growth (Above 50%)															
1. With Railway Stn.	.	.	.	.	.	1.83	78.14	25.80	.62	103.09	300.25	46.83	12.41	00	02
2. Without Rly. Stn.	.	.	.	.	.	2.32	112.63	40.74	.76	110.66	356.02	57.50	18.10	41.34	.09
TOTAL	.	.	.	.	.	2.02	91.41	31.59	.67	106.04	322.04	51.00	14.63	16.15	05
B. Medium Growth (Between 10 - 50%)															
1. With Railway Stn.	.	.	.	.	.	1.41	59.76	20.39	.66	87.53	290.94	48.26	15.96	00	.07
2. Without Rly. Stn.	.	.	.	.	.	1.15	50.66	17.18	.96	91.92	343.92	55.68	28.04	27.77	.02
TOTAL	.	.	.	.	.	1.30	55.90	19.04	.78	89.38	313.30	51.39	21.06	11.27	.05
C. Slow Growth (Less than 10%)															
1. With Railway Stn.	.	.	.	.	.	1.06	16.35	28.72	.69	84.97	310.93	48.95	17.52	00	00
2. Without Rly. Stn.	.	.	.	.	.	1.81	64.87	22.39	.86	109.86	378.08	62.52	22.52	32.36	.10
TOTAL	.	.	.	.	.	1.50	86.72	25.06	.79	99.23	349.41	56.73	20.38	18.53	.06
Aggregative Level															
1. With Railway Stn.	.	.	.	.	.	1.58	80.96	24.99	.64	95.72	299.98	47.60	14.28	00	.03
2. Without Rly. Stn.	.	.	.	.	.	1.88	82.53	29.25	.84	106.12	360.38	58.71	21.79	35.34	.08
TOTAL	.	.	.	.	.	1.71	81.66	26.88	.73	100.34	326.79	52.53	17.61	15.69	.05

TABLE XXII

Average Value of the Indicators for Municipal Finance, Civil Amenities and Others for Towns with and without Railway Connections in Different Growth Categories

Growth Category	Per thousand persons (1971)				Airlines 1971 per (1000 persons)	Water Supply 1971 gallons per (1000 persons)	Med. Index 1971	Edu. Index* 1971	Recrea- tion Index* 1971	House- holds per 100 Houses	Sex Ratio* 1981	Male literacy 1981
	Income through Taxes	Total Receipts	Expend. on G. n. Adm. n.	Total Expd.								
A. Fast Growth (Above 50%)												
1. With Railway Stn.	49297	110045	15264	96796	133.53	1243228	.16	1.20	.38	116.02	879.27	61.20
2. Without Rly. Stn.	32990	88860	21008	94058	143.41	985350	.33	1.56	.51	114.81	870.81	60.98
TOTAL	43207	101047	17417	95760	137.32	1151228	.22	1.34	.43	115.55	875.96	61.11
B. Medium Growth (Between 10 - 50%)												
1. With Railway Stn.	63441	17316	17323	150322	209.56	130921	.15	1.19	.40	115.07	905.77	57.85
2. Without Rly. Stn.	15624	33943	7045	31902	126.55	30817	.21	1.40	.40	121.70	925.28	54.64
TOTAL	46505	114978	13030	101059	174.92	96269	.18	1.28	.40	117.87	914.00	56.49
C. Low Growth (Less than 10%)												
1. With Railway Stn.	16161	39326	6276	39889	132.53	130637	.24	1.48	.45	113.21	947.97	60.50
2. Without Rly. Stn.	3314	100039	18084	123355	88.76	612099	.42	1.57	.64	109.93	956.05	59.72
TOTAL	25906	77824	13070	88055	106.94	871296	.34	1.53	.56	111.33	952.60	60.06
Aggregate Level												
1. With Railway Stn.	47906	112875	14067	99894	153.91	931296	.17	1.25	.40	115.24	899.08	60.23
2. Without Rly. Stn.	28852	81496	16645	89031	121.09	655865	.33	1.53	.53	114.81	910.79	59.12
TOTAL	39614	9915	15194	95131	139.37	817906	.24	1.37	.45	115.05	904.28	59.73

*See 4-1-5 for explanation of the indicators.

TABLE XXIII
Correlation of Urban Growth During 1961-71 and 1971-81 With Demographic and Economic Indicators in Fast Medium and Slow Growth Categories

Growth Categories	Percentage of Workers in 1971 as						Male Part. Rate (1971)	No. of comm. dities manu- factured (1977)		
	Growth Rate		Percentage of Workers in 1971 as							
	1961-71	1971-81	Culti- vators	Agri- Labour	H.H. Non Industry	Non-HH Man. Industry			Const- ruction	Trade abd Comm.
A. Fast Growth :										
Growth Rate during										
1961-71	.	.	.	.	.	.	.	.	.	.
1971-81	.	.	.	.	.	.	.	.	.	.
B. Medium Growth :										
Growth Rate during										
1961-71	.	.	.	.	.	.	.	.	.	.
1971-81	.	.	.	.	.	.	.	.	.	.
C. Slow Growth :										
Growth Rate during										
1961-71	.	.	.	.	.	.	.	.	.	.
1971-81	.	.	.	.	.	.	.	.	.	.
Aggregate Level :										
Growth Rate during										
1961-71	.	.	.	.	.	.	.	.	.	.
1971-81	.	.	.	.	.	.	.	.	.	.

Note : * indicates significant at one percent level.
† indicates significant at 5 percent level.

TABLE XXIV

Correlation of Urban Growth during 1961-71 and 1971-81 with Infrastructural Indicators (1971) for Towns in Fast, Medium and Slow Growth Categories

Growth Categories		Average Distance from the Nearest									
		Road Length (kms.)	Domestic Elect. Connections	Indus- and Comm. Elect. Conns.	Banks etc.	City	State H.Q.	District H.Q.	Sub-Div. H.Q.	Railway Stn.	Bus Route
A. Fast Growth :											
Growth Rate during											
1961-71.	.	0.009	0.024	0.031	-0.106*	0.062	0.050	0.018	0.100	0.050	0.13
1971-81	.	0.016	0.038	-0.055	0.019†	-0.051	-0.069	0.080**	0.070**	0.033	0.074†
B. Medium Growth :											
Growth Rate during											
1961-71.	.	0.020	0.112*	0.0482	-0.0194	0.0775†	0.012	0.018	-0.020	-0.014	-0.024
1971-81.	.	0.018	0.123*	0.067	0.0676	0.027	0.122*	-0.059	-0.052	-0.036	0.127*
C. Slow Growth :											
Growth Rate during											
1961-71	.	-0.183*	-0.095†	-0.107*	0.6172	-0.0993	0.063	-0.073†	-0.0973	0.074†	-0.108*
1971-81	.	0.0004	0.0687	0.033	0.0717†	0.039	-0.171*	0.0356	-0.006	-0.149*	-0.029
Aggregative Level :											
Growth Rate during											
1961-71.	.	-0.01	0.01	0.034	-0.07†	0.05	0.01	-0.01	-0.02	0.03	-0.03
1971-81.	.	0.028	0.054	-0.019	0.04†	0.011	-0.104*	0.016	-0.028	-0.010	0.045

Note : * indicates significant at one per cent level.

† indicates significant at five per cent level.

TABLE XXV
Correlation of Urban Growth during 1961-71 and 1971-81 With Indicators of Municipal Finance, Civic Amenities and Others for Towns in Fast, Medium and Slow-Growth Categories

Growth Categories	Per capita (1971)				Litter- ines 1971	Water Supply 1971	Med. Index 1971	Edu. Index 1971	Recrea- tion Index 1971	House holds per 100 houses 1971	Sex Ratio 1971	Male Literacy 1971
	Income through taxes	Total Receipt	Exp. on Gen. Admn.	Total Expen- diture								
A. Fast Growth :												
Growth Rate during												
1961-71.	.	.	.	.	0.015	0.127*	0.036	-0.016	0.045	-0.075	-0.050	0.074†
1971-81.	.	.	.	.	0.039	0.092*	0.014	0.013	0.101*	-0.026†	-0.126*	0.056
B. Medium Growth :												
Growth Rate during												
1961-71.	.	.	.	.	0.067	0.209*	0.052	0.032	0.034	0.029	-0.089†	-0.034
1971-81	.	.	.	.	0.041	0.0243	0.007	0.123*	-0.061	-0.010	-0.165*	-0.053
C. Slow Growth :												
Growth Rate during												
1961-71	.	.	.	.	-0.044	-0.064	-0.064	0.077†	0.004	-0.023	0.065	0.175*
1971-81	.	.	.	.	0.085†	-0.032	0.017	0.0931†	0.118*	0.029	-0.210*	-0.131*
Aggregate Level :												
Growth Rate during												
1961-71	.	.	.	.	-0.02	0.091†	-0.02	-0.072†	-0.01	0.002	-0.173*	0.109*
1971-81	.	.	.	.	0.038	0.080†	-0.008	0.025	0.033	0.008	-0.267*	0.042

Note : *Indicates significant at one per cent level.

†Indicates significant at five per cent level.

TABLE XXVI
Correlation of Population of 1971 and 1981 With Demographic and Economic Indicators for Towns in Fast, Medium and Slow Growth Categories

Growth Categories	Growth Rate		Percentage of Workers in 1971 as						Male	N. of commo- dities manu- factured (1971)	
	1961-71	1971-81	Culti- vators	Agrl. Labour	HH. Man Industry	Non HH Man Industry	Construc- tion	Trade & Comm.	other Services		Part. Rate 1971
A. Fast Growth :											
Population 1971	.	.	.	.	.	.	.	.	.	.	.
Population 1981	.	.	.	.	.	.	.	.	.	.	.
B. Medium Growth :											
Population 1971	.	.	.	.	.	.	.	.	.	.	.
Population 1981	.	.	.	.	.	.	.	.	.	.	.
C. Slow Growth :											
Population 1971	.	.	.	.	.	.	.	.	.	.	.
Population 1981	.	.	.	.	.	.	.	.	.	.	.
Aggregate Level :											
Population 1971	.	.	.	.	.	.	.	.	.	.	.
Population 1981	.	.	.	.	.	.	.	.	.	.	.

Notes : *Indicates significant at one per cent level.

†Indicates significant at five per cent level.

TABLE XXVII
Correlation of Population of 1971 and 1981 with Infrastructural Indicators for Towns in Fast, Medium and Slow - Growth Categories

Growth Categories	Road Length (kms.)	Domestic Elect. Connections	Indus. & Comm. Connections	Banks etc.	Average Distance from their Nearest					
					City	State H.Q.	District H.Q.	Sub-divn. H.Q.	Railway Station	Bus Route
A. Fast Growth :										
Population 1971	.027	.023	.017	.009*	.0006	.112*	.166*	.122*	.078†	.022
Population 1981	.028	.018	.016	.102*	.0004	.112*	.172	.124*	.081†	.018
B. Medium Growth :										
Population 1971	.019	.001	.067†	.037	.080†	.100*	.052	.055†	.038	.014
Population 1981	.020	.061†	.067†	.039	.081†	.103*	.054	.058†	.040	.005
C. Slow Growth :										
Population 1971	.238*	.63†	.017	.226*	.083†	.096†	.191*	.233*	.167*	.078†
Population 1981	.241*	.057†	.012	.222*	.061*	.143*	.167*	.233*	.188*	.078†
Aggregative Level :										
Population 1971	.007	.011	.007	.025	.038	.053	.038	.028	.017	.003
Population 1981	.008	.011	.007	.028	.038	.057†	.004	.033	.020	.004

Note : *Indicates significant at one per cent level.

†Indicates significant at five per cent level.

TABLE XXVIII
Correlation of Population of 1971 and 1981 with Indicators of Municipal Finance, Civic Amenities and other for Towns in Fast, Medium and Slow Growth Categories

Growth Categories	Per capita (1971)				Latrines 1971	Water Supply 1971	Med. Index 1971	Edu. Index 1971	Recrea- tion Index 1971	House- holds per 100 houses 1971	Sex Ratio 1971	Male Literacy 1981
	Income through taxes	Total Receipt	Exp. on Gen. Adm.	Total Expen- diture								
A. Fast Growth :												
Population 1971	-.023	-.029	-.039	-.027	-.011	-.014	-.047	-.112	-.112	.011	.011	.054
Population 1981	-.020	-.026	-.038	-.024	.018	-.013	-.041	-.108	-.110*	.007	.001	.059†
B. Medium Growth :												
Population 1971	-.007	-.008	-.011	-.009	-.018	-.001	-.054	-.102*	-.075†	-.003	-.108*	-.049
Population 1981	-.006	-.007	-.011	-.008	-.016	.002	-.056	1.104*	-.077†	.002	-.067†	.531
C. Slow Growth :												
Population 1971	-.123	-.143*	-.137*	-.121*	.003	-.097†	-.120*	-.172*	-.245*	.069†	.040	.139*
Population 1981	-.113*	-.135*	-.128*	-.110*	.009	-.098†	-.116*	-.164*	-.239*	+.081†	.004	.114*
Aggregate Level :												
Population 1971	-.005	-.006	-.008	-.007	-.010	-.003	-.012	-.013	-.035	.0002	-.035	.017
Population 1981	-.005	-.006	-.009	-.006	-.008	-.013	-.014	-.036	-.039	-.0009	-.020	-.037

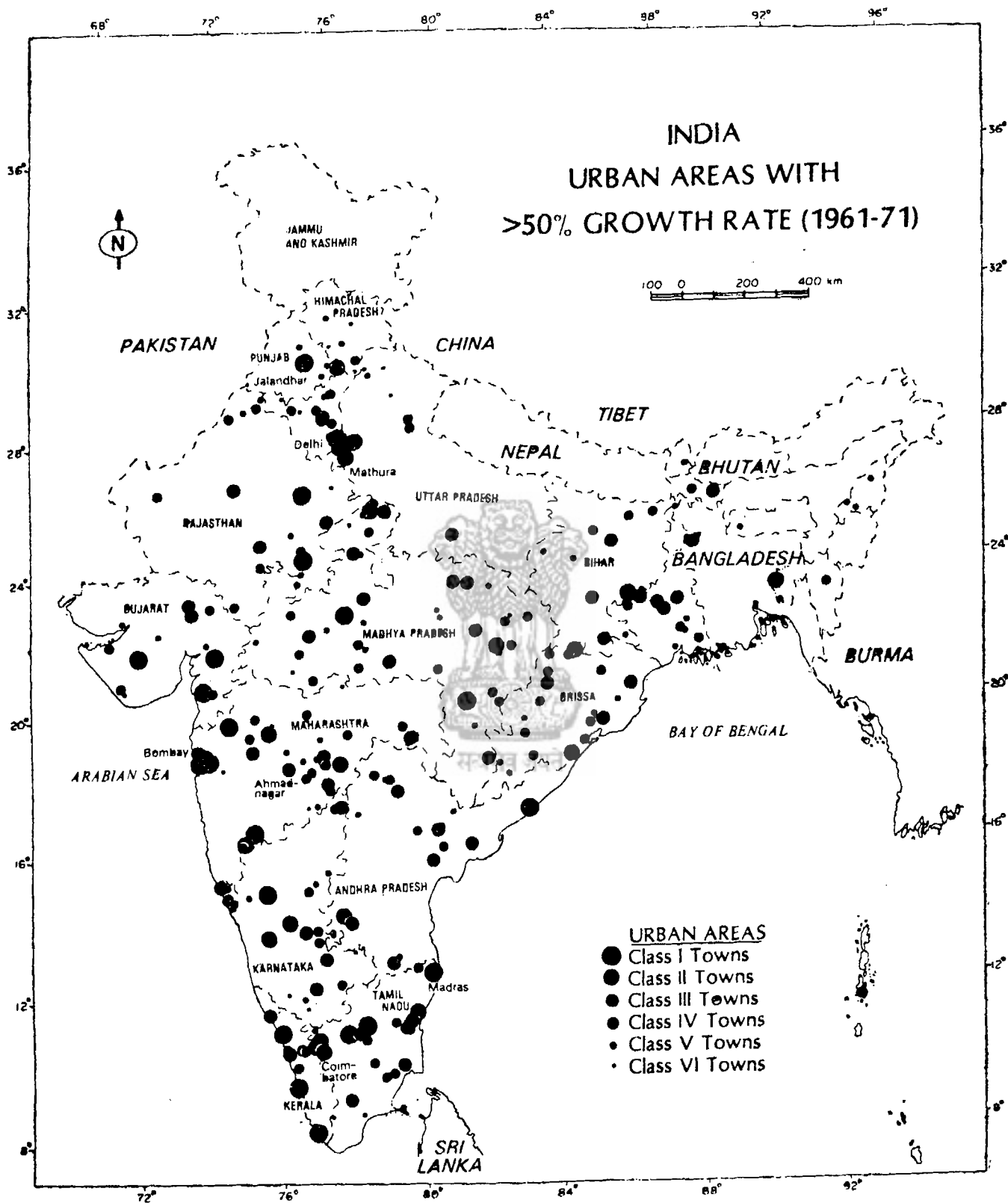
Note : *Indicates significant at one per cent level.

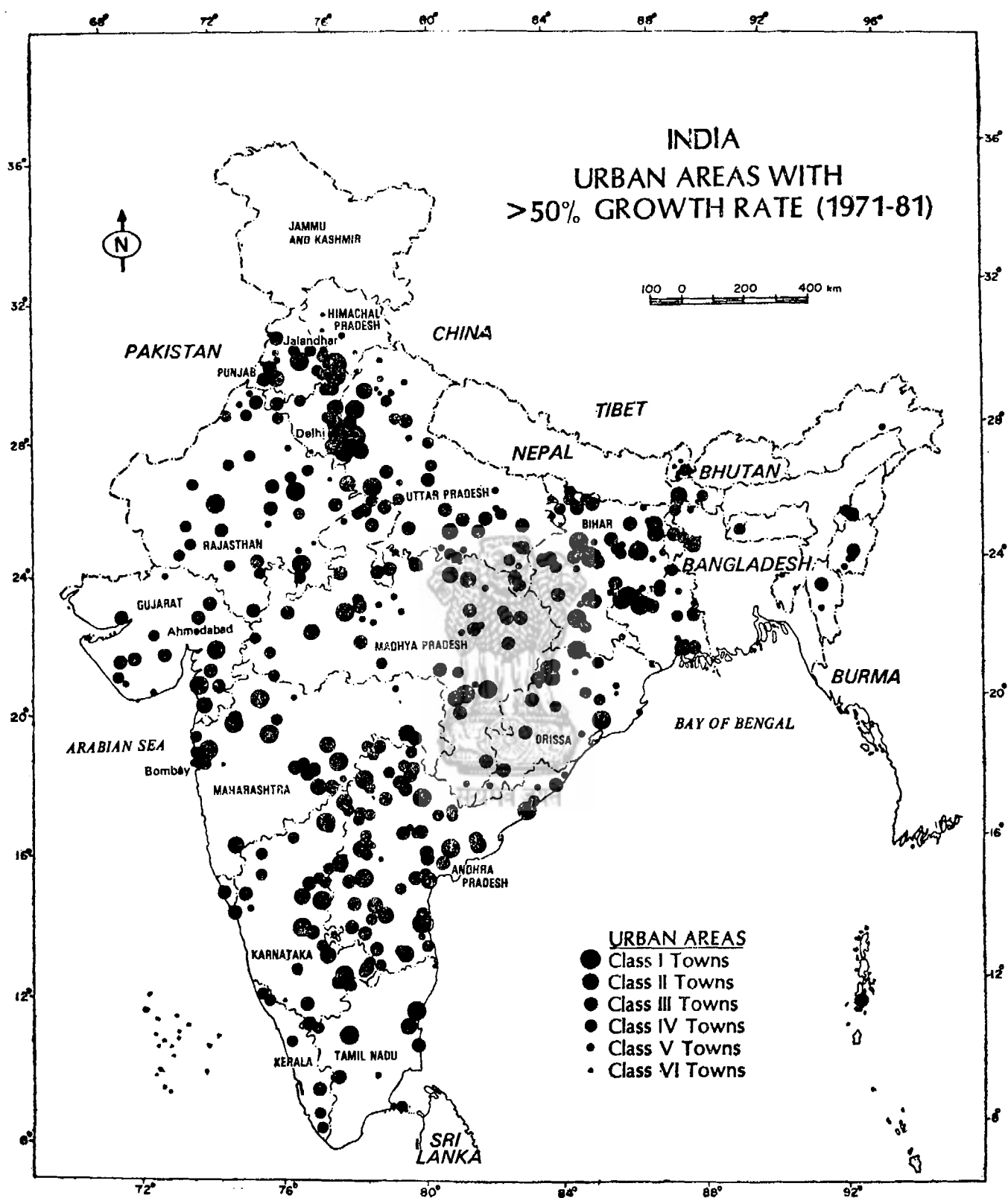
†Indicates significant at five per cent level.

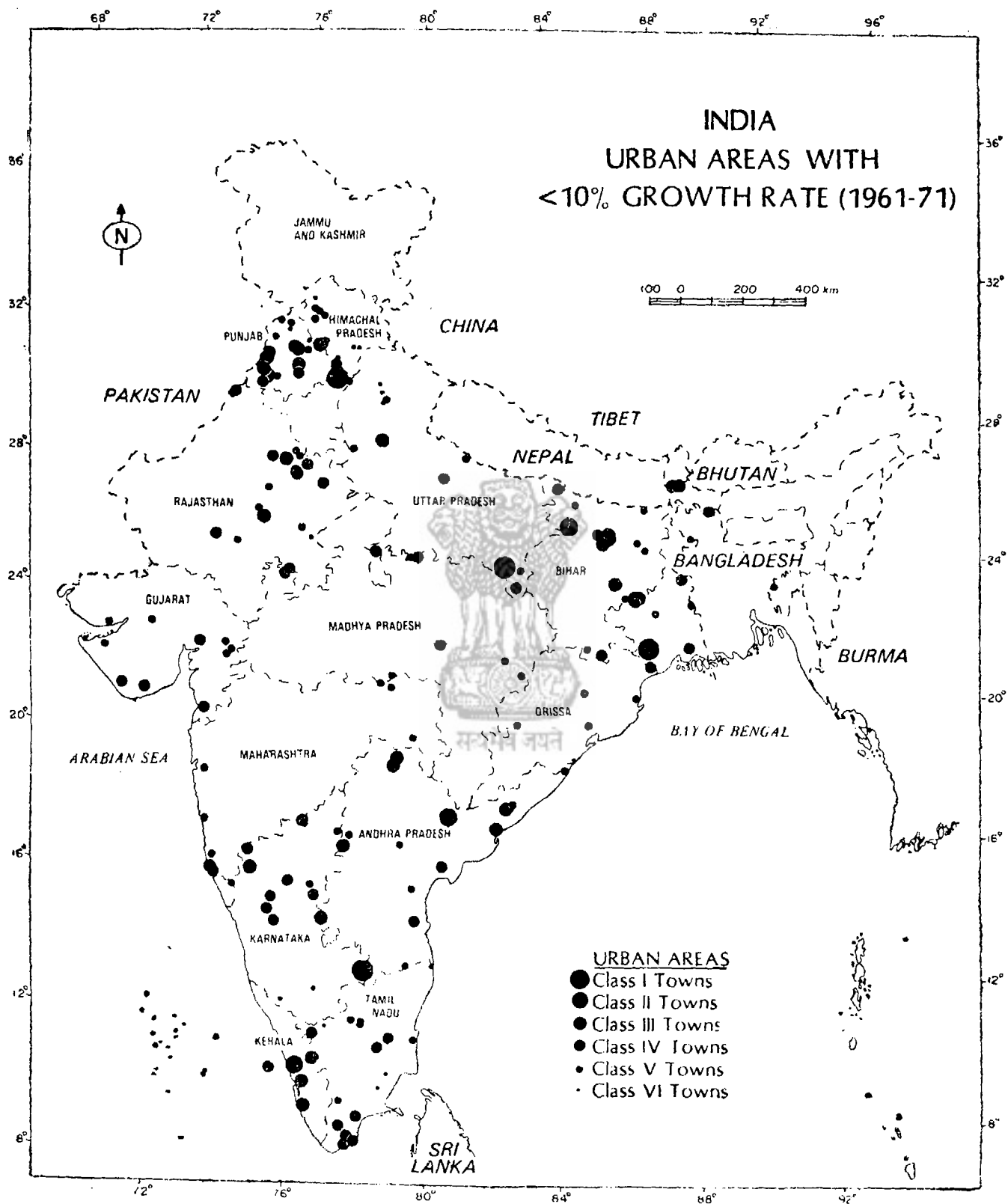
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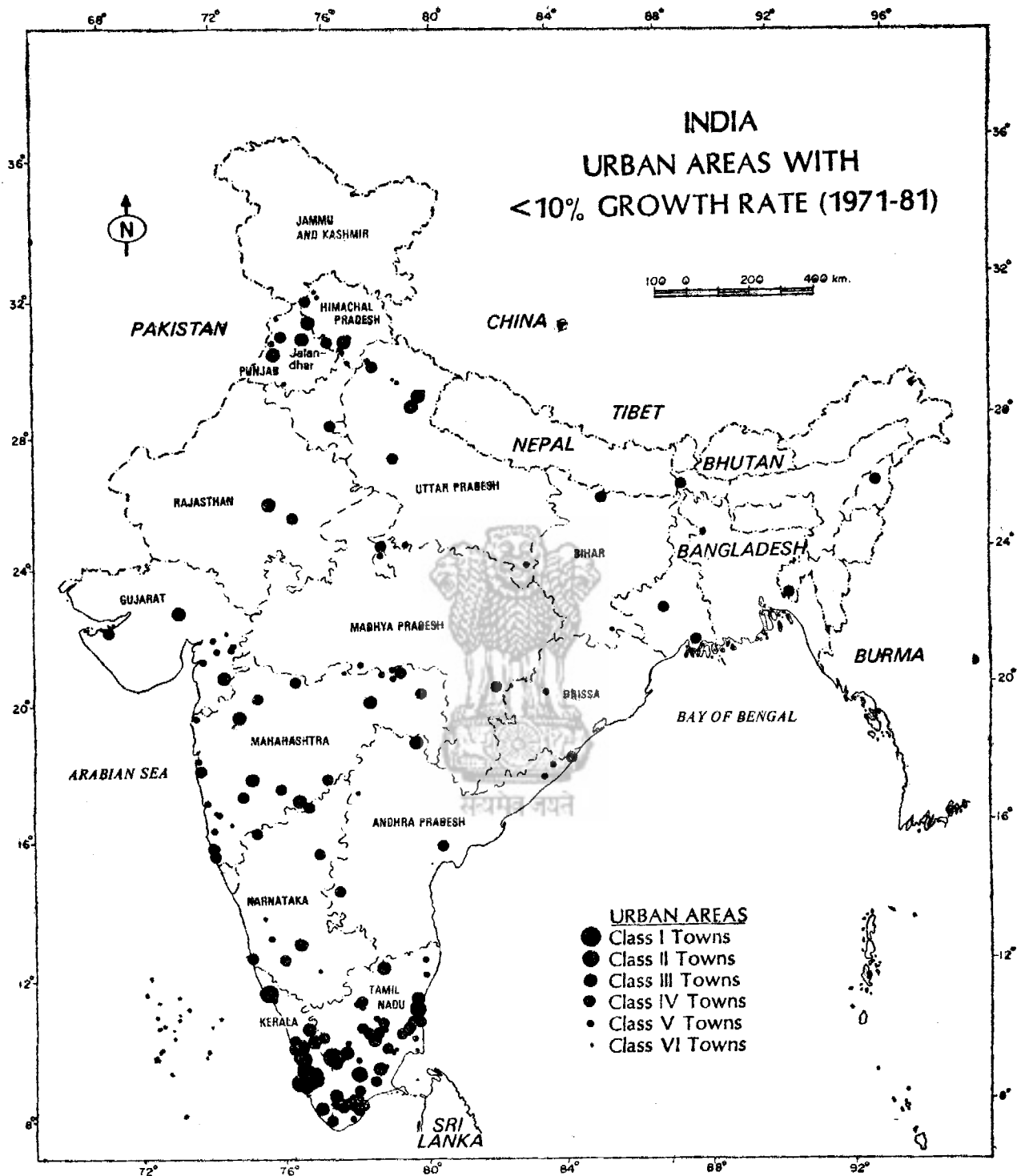
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सत्यमेव जयते

Reshaping Urban Growth Patterns : Some Options



NATIONAL INSTITUTE OF URBAN AFFAIRS
New Delhi



सत्यमेव जयते

Preface

RESHAPING URBAN GROWTH PATTERNS : SOME OPTIONS is concerned with the future patterns of urbanisation.

Undertaken at the instance of the National Commission on Urbanisation, this study report shows, to begin with, that the existing distribution pattern of urban population in India is uneven and skewed—whether one looks at it in terms of size classes or regions. It suggests that if the present pattern of growth continues, then India will encounter in the year 2001 A.D. at least three megalopolises, 46 one-million cities, about 450 cities with more than 100,000 population, and a score of others which will enter the urban space through a simple process of reclassification of rural settlements into urban.

How can the existing pattern of population distribution be changed in light of the fact that the 1981-2001 period may register an addition of at least 160 million persons to the country's already large urban population base?. This is the question that this report attempts to address.

The report points out that the question of the future pattern of urban population growth is linked with several normative considerations, such as—should the future pattern be reshaped on efficiency

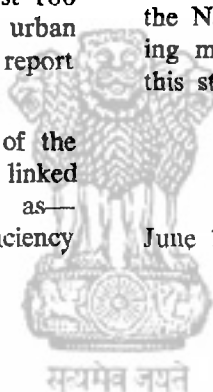
grounds or on the basis of equity, both of which happen to share today's manifesto of development goals? Should the future urban policy be concerned with only spatial goals or designed to serve the larger national economic and social objectives?

The report argues that any urban policy aimed primarily at the correction of spatial imbalances is myopic, and if the policy has to take roots in the country then it will be necessary to link it with the larger socio-economic framework. It offers several possible courses of actions to link the two.

The undersigned has been assisted in the preparation of this report by V. K. Dhar, Housing, Environmental and Urban Planner, and Pushpa Pathak, Research Fellow at the National Institute of Urban Affairs supported by a team of dedicated researchers. I would like to acknowledge their assistance on this study. I would also like to express my gratitude to the National Commission on Urbanisation for affording me opportunities of presenting draft findings of this study.

OM PRAKASH MATHUR
Director

June 1988





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सत्यमेव जयते

Introduction

Almost all population projections indicate that India's urban population will cross the 320 million mark by the turn of the century. Between 1981 when it stood at 159.7¹ million and the year 2001, nearly 160 million persons are expected to be added to India's urban population base. One important aspect of this growth which bears overwhelmingly on this study is that of the expected increase of 160 million, migration from rural areas will account for anywhere between 60—70 million persons. The balance will be accounted for by natural increase (65 million) and reclassification of rural settlements into urban as well as readjustment of boundaries (30 millions).²

Evidently, the question arises as to where should this increase take place, assuming, of course, that it is possible to influence and channel the impending growth into appropriately chosen areas and locations. Should this question of the future population distribution be left to the market—howsoever distorted it might be, or should an attempt be made to intervene into the market and direct this growth into specific regions, areas, even individual centres which may be especially chosen for future urban development? Should the growth be directed towards larger cities to achieve economies of scale and higher levels of productivity, or towards smaller towns for fostering better rural-urban linkages? Should the growth be promoted in regions that are already developed and fast developing, or in lagging regions? This set of questions implies that the way population is distributed in space makes a difference to the overall development processes, and that the spatial distribution of urban

population is not a neutral factor in development. Or, else, the distributive aspects of population growth will not be an issue in urban policy making exercises.

It needs to be pointed out at the very outset that the entire field of urban population growth and change is immensely complex, and despite long years of research and empirical work not much light has been shed on why growth occurs in some areas and not in others, and why certain towns register high population growth and others lag behind. The explanations that one finds in literature have been either too general attributing the growth or the lack of it to the classical factors of production, or too specific to the towns in question. One point that has emerged from the past work is that urban population growth and change is a dynamic and interactive process, and to try to explain it in any definitive way could be misleading, if not hazardous. As a consequence, the countries have not found it easy to formulate policies to influence population distribution. There are few countries today that have explicit or direct policies of population redistribution. Those who have them have not succeeded in their efforts to alter the pattern of population distribution. These countries have also realised that it is not something that can be accomplished in a short run; it requires "much capital diverse infrastructure, a time perspective of 15—20 years, and a strong regional development effort to distribute even 1-2 per cent of population:"³

Irrespective of the limits of such policies, the fact remains that the distributive aspects of population growth can not be left to the market particularly in

1. Includes the estimated urban population of Assam.

2. During 1971-81, migration contributed 40.13 per cent to the total urban population growth. Natural increase contributed 41.25 per cent and 18.6 per cent of the increase was contributed by reclassification of settlements into urban. The same percentages have been applied to estimate their relative contributions in the decades 1981-2001. See National Institute of Urban Affairs, *State of India's Urbanisation*, New Delhi, June 1988.

3. Robin J. Pryor, "Population Redistribution: Policy Formulation and Implementation", in United Nations, *Population Distribution Policies in Development Planning*, New York, 1981.

a country like India where the distribution of urban population is quite uneven and skewed.¹ It is also evident that if this pattern of growth persists, and the distribution is left to the forces and pressures which are exercised by the locational decisions of major economic sectors taken independently, then the chances are that India may up in the year 2001 with at least three megalopolises (Calcutta, 16.53 million, Bombay, 16.0 million, and Delhi 13.52 million), as many as 46 cities in the population range of 1-10 million (as against 12 of 1981), and about 450 cities with populations ranging between 100,000—1 million.² This general picture of the future distribution is not enviable particularly if it occurs without the planners and people being conscious of, and prepared for it.

It is in the context of the larger issue of the future course of urbanisation that this study has been conducted. The specific context of the study, however, has a legacy which cannot be overlooked. During the census decade 1971—81, 568 urban centres (17.2 per cent of the total 1971—81, 568 urban centres³ experienced a population growth rate of over 46.24 per cent, this being the average growth rate of urban population in the country during the said period.⁴ Likewise, the population growth rate of 487 urban centres (14.7 per cent of the total) turned out to be less than 20 per cent, 20 per cent being the estimated natural growth rate of urban population during 1971-81. While it was generally understood that there will invariably be towns which will achieve higher than average growth rates and others will lag behind, the sheer number of the fast and slow growing towns, 1055 out of a total 3301 urban centres, gave rise to a number of searching questions: what happened during this census decade that caused such a large number of them to register a growth rate of 46.24 per cent, and others, 487 of them, to experience a low population growth rate? Was it a new phenomenon on India's urban space or a continuation of the past trends? Was this merely a demographic phenomenon of expansion and contraction, or associated with economic, social and physical changes? Was it caused by factors internal to the towns or influenced by external forces? The central issue was about the process of urban growth and decline: was it really so dynamic as had been predicted in the previous

work, or was it possible to distinguish features which characterised the fast and slow growing towns, to identify the factors responsible for change, and design on that basis future policy interventions?

The National Commission on Urbanisation (NCU) proposed that these questions should be systematically examined and studied in order that it can make "specific recommendations on the towns which should be selected for development."⁵ Vide letter No. K-14011/41/85-UD/III.A, the Commission proposed that the study should cover :

- (i) a macroanalysis of the demographic aspects of the fast growing and slow growing towns; it should aim at a better understanding of their broad characteristics and typologies;
- (ii) a microanalysis of a few sampled fast growing and slow growing towns, with the object of identifying their economic, social and physical features and characteristics; and.
- (iii) the process of identification of town for "development".

The National Institute of Urban Affairs submitted an Interim Note in the month of November 1987, presenting in it the first set of results of —

- (i) the demographic aspects of the entire universe of the fast growing and slow growing towns. It focussed on determining whether there was any regularity and consistency in the pattern of their growth & decline; and
- (ii) the data from a field survey of 35 fast growing and an equal number of the slow growing towns. Data from the field survey related to those aspects which, on *prima facie* considerations, indicated the growth or the stagnation of the economy of the towns.

The note, as mentioned, was interim. More important, it was *partial* as it focussed on only the fast growing (568) and slow growing towns (487) of the 1971-81 decade, ignoring from its scope 1365 urban centres whose populations had risen moderately, that is, between 20-46.24 per cent. Also, it did not examine the role of the 881 new towns of 1981,

1. It has been amplified in subsequent sections. See also, National Institute of Urban Affairs, "A Report of the Symposium on Interim Report of the National Commission on Urbanisation", New Delhi, October 1987.

2. These numbers are based on population projections by using straight line methods.

3. India had a total of 3301 urban centres in 1981. This number treats urban agglomerations as single units.

4. Excluding the growth rate of Assam.

5. National Commission on Urbanisation, *Interim Report*, p. 10, New Delhi, 1987.

meaning that these were not candidates in any scheme of future urban development. This proposition was clearly unacceptable.

In this study on the future patterns of urbanisation, we have analysed the growth behaviour of the entire universe of 3301 towns, with a view to identify the existing distribution patterns of urban growth and to determine the most viable options for the future course of urbanisation. Emphasis has been placed on the selection of a combination of patterns and strategies of urban growth which can, on the one hand, meet the broader economic and social development objectives—assuming that there will be no major or dramatic departures from those which have sustained our development paths so far, and, on the other hand, serve the diverse needs of this large country.

India is endowed with diverse patterns of urbanisation. There are regions and subregions that have attained moderate to high levels of urbanisation and are still registering high urban population growth. These are contrasted with others where both the urbanisation levels as well as growth rates are low in comparison with the averages for the country. Then there are regions which are at a very low level of urbanisation but are going through a process of urban growth. There are areas which have earned distinction of having a concentration of slow growing and stagnating towns. The forces underlying the patterns also vary; in some regions, these are the outcomes of agricultural prosperity; in others, of agricultural stagnation. In yet others, it is the industry-concentration of manufacturing activities, which has shaped the urbanisation processes. In Uttar Pradesh and Bihar, a substantial part of urban growth during 1971-81 has occurred due to the notification of the erstwhile rural settlements into urban.

All these diverse patterns tend to clearly suggest that they can not be dealt with in the framework of a simplistic policy. A policy, for instance, to develop small and medium towns without their being related to the overall system of settlements is unlikely to yield the desired results in a situation where the patterns of growth, the forces underlying them, the problems of urbanisation and the needs of the various regions happen to be different. Likewise, a policy directed at a particular region or a subregion can, at most, provide a short-term palliative.

Literature on urbanisation is replete with references to growth poles, growth centres, decentralised concentration, balanced urban growth, and systems approaches to urban population distribution. By and large, these approaches have focussed on either a

preferred size group, or a preferred region or a sub-region. In this study, we have taken a view that for a long range urban policy, a broader view linking urbanisation and urban growth with economic development processes is necessary. Such an approach alone can provide the necessary interface between urban and national economic development.

At least five types of responses and interventions have been proposed in this study. These are:

Development of high productivity urban corridors—The rationale of, and justification for, this proposal is based on the fact that there are several areas in the country that have attained economies of scale, of agglomeration and specialisation. These are the centres of high technology research and development. Much of the country's GNP emanates from such centres. They have begun to form clusters but do not yet enjoy the interindustry and spatial linkages. One of the proposed responses is to develop selected "urban corridors" in order to further maximise the scale and specialisation economies.

Development of a network of secondary cities and towns—The primary focus underlying this intervention is not so much to slow down the growth of large cities but develop a network of medium-sized towns which would be able to establish and foster better and sustainable rural-urban relationships. These will enable the rural areas to take full advantage of the urban services, and the urban areas to develop rural and agri-based technologies and services.

Development of an interlinked hierarchy of urban settlements—Such a strategy is necessary for regions where the size of urban settlements, and consequently the levels of demand are small, and where because of the scale limitations, investments in infrastructure and services can neither be justified, nor sustained. An interlinked hierarchy of settlements which can mutually support and reinforce each other is inevitable for such regions.

An urban revitalisation strategy for stagnating towns—The basic idea is to intervene in those regions which have a disproportionately high concentration of slow growing and stagnating towns. Initially, the objective will be to identify the reasons of stagnation in those areas and then design specific policies to revitalise the economy of those areas.

Prevent spurious urban growth—A detailed study of the components of urban population growth suggests that in states like Uttar Pradesh and Bihar, much of the urban population increase during 1971-81 occurred as a result of the notification of erstwhile

rural settlements as municipal bodies, without any regard to the criteria used by census for classifying settlements as "urban". This is, at best, an administrative decision to classify an area as urban. Such areas have virtually no urban character. The idea underlying this proposal is to make the procedures of classifying settlements as urban "stricter" and prevent what one might call spurious urban growth.

Admittedly, a strategy that aims at the simultaneous development of urban corridors, a network of secondary cities, a hierarchy of centres in selected regions, revitalisation of stagnating towns, and prevention of spurious urban growth would require a bold and stronger action. The five-year plans have so far not recognised the importance of looking at the entire spectrum of urban space. The approach has so far

been to look at a part of the urban space. In times of resource scarcity, it is this sector that has suffered. The National Institute of Urban Affairs believes that the present approach is myopic and needs to be jettisoned in favour of one which can maximise the contribution of urbanisation to the total development process. Often, it is less than realised that the urban sector is as vital to the country's economy as the rural sector. It is atleast twice as productive (in terms of GNP) as its rural counterpart." A positive orientation of the future pattern of urbanisation will unquestionably further its contribution to economic growth and help in the attainment of other development goals.

It is this message that constitutes the main theme of this study.



Patterns of Urban Population : Growth and Distribution

The question where to direct the future urban population and how to identify the areas of intervention have been approached in literature from a variety of angles. The first and perhaps the most conventional and widely used of the approaches has been to analyse the urban population growth and distribution according to the population size class of urban centres. Wherever the analysis has shown that the urban population is unevenly distributed between centres of different sizes, and that the weight of any one class overshadows the weights of other classes, then interventions have been proposed to change the pattern of distribution in favour of the most "preferred size class". The size class analysis has been the forte of much of the urbanisation literature in the country.

A second approach—also very dominant in urban analysis, has been to look at urban population in terms of its distribution in regions and subregions. If the distribution is considered to be skewed, imbalanced and distorted, then policies have been proposed to correct the distortions, again on the basis of the most "preferred region or subregion". This approach has been the bane of the backward area development and balanced regional development policies and programmes in many countries.

Then there is the third approach which focusses on the growth rates of the individual urban centres. This approach involves an analysis of the growth rates of the various categories of urban centres, that is, fast growing, moderately growing, and slow growing, and design policies to influence and temper with the growth rates in such a way that they fall in line with the urban policy goals and objectives.

In order to be able to determine which of the approaches would be most appropriate in the context of the main issue of the future patterns of urbanisation, it is necessary to look at the existing distribu-

tion patterns of urban population from at least two interrelated points of view—

- from the point of view of the variations in the existing distribution of urban population, that is, whether there are variations in the existing distribution by sizes class of urban centres, or by regions and subregions; and whether the existing patterns are balanced or imbalanced?
- from the point of view of the regularity in the patterns of urban population growth and distribution, that is, whether it is possible to distinguish or identify any dominant pattern(s) of urban population growth and distribution.¹¹

1. Size Class Analysis

It is best to begin by looking at the overall distribution of urban population in terms of firstly, the size classes of urban centres; secondly, the regions and subregions; and finally the population growth rates of individual centres, with the help of data drawn from the census reports. Table 1 gives the 1981 urban population according to the size classes of urban centres.

TABLE 1
Size Distribution of the Number of Urban Settlements with their Share in Urban Population, 1981

Size categories	Number of urban settlements	Urban population	
		Total (million)	% of the total
Large cities (>100,000)	218	95.33	60.46
Medium sized towns (20,000—100,000)	1013	40.75	25.84
Small towns (<20,000)	2070	21.60	13.70
Total	3301	157.68	100.00

11. The above is central to the analysis, as there is no way in which the future patterns of urbanisation could be determined independent of what exists on the ground. Theoretically, of course, it is possible to construct models of population distribution which stand delinked from the existing distribution, but such models are outside the realm of reality, and do not, therefore, form a part of this study.

Table 1 shows that in the census year 1981, the total urban population of the country placed at 157.68 million (excluding that of Assam) was distributed in 3301 urban centres. Of these, 218 urban centres had populations in excess of 100,000; 1031 were in the population range of 20,000–100,000; and the balance of 2070 urban centres were small towns having a population base of less than 20,000.

According to the table, the 218 urban centres in the population range of more than 100,000 accounted for 60.46 per cent of the country's total urban population. The share of the secondary or the medium-sized towns (20,000–100,000 size class) was low, being 25.84 per cent. The weight of the small towns—2070 of them, which accounted for 13.70 per cent of the total urban population was even lower, indicating that the urban centres in the size class of more than 100,000 carried a disproportionately large weight on India's total urban space.¹²

It is important to note that the large city size class has not always been in this primate position. In 1901, for instance, this size class accounted for only 25.95 per cent of the country's total urban population. Even in 1951, the first census held after India attain-

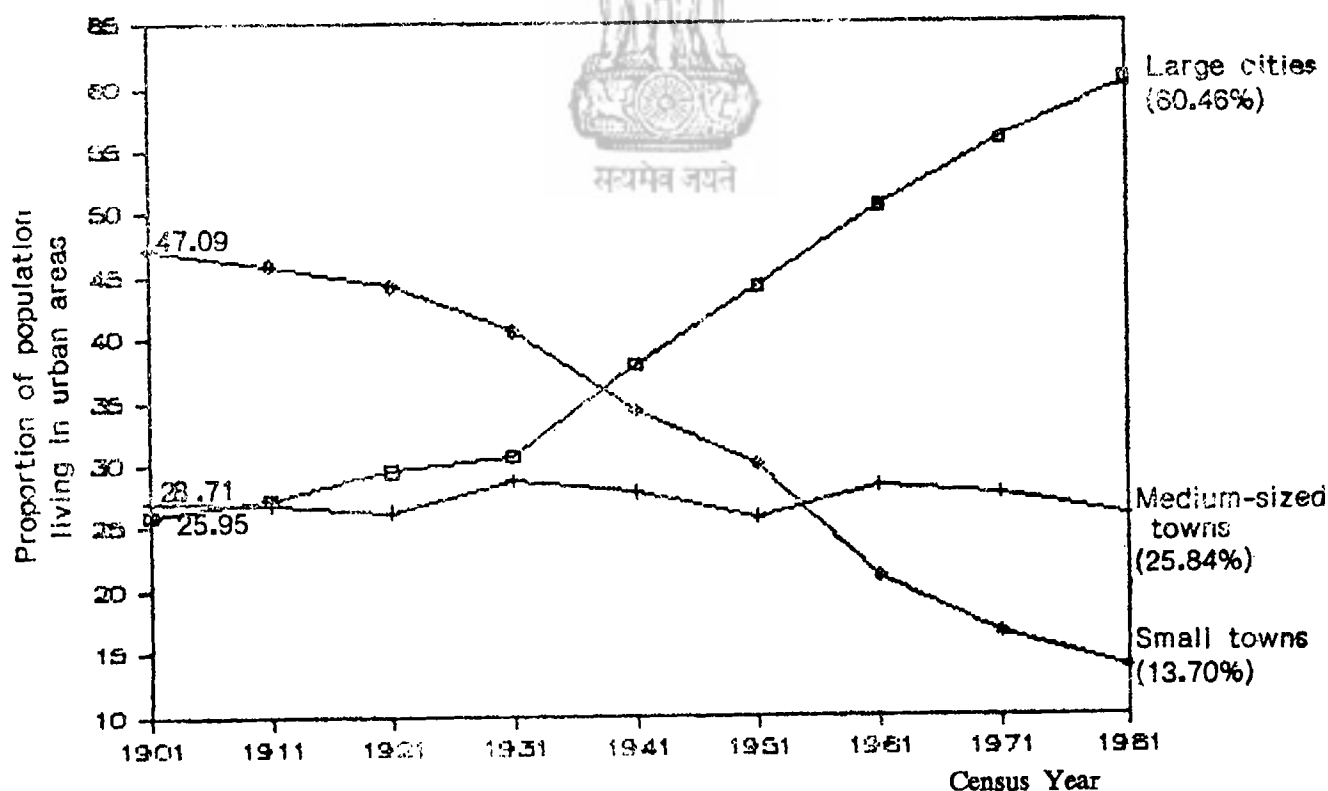
ed independence, large cities as a class carried a much lower population weight. In contrast, the small towns size class had 47.09 per cent of the total urban population in 1901; in 1951, its share was 30.01 per cent. The medium-sized towns (20,000–100,000) have maintained, somewhat stoically, stability in their share in total urban population. Graph 1 and Table 2 may be seen for historical data on the respective shares of the various size classes of urban centres.

TABLE-2
Percentage Distribution of Urban Population by Size Classes, 1901–1981

Year	Size classes		
	Large (+100,000)	Medium (20,000— 100,000)	Small (—20,000)
1901	25.95	26.96	47.09
1911	27.30	26.75	45.95
1921	29.50	26.24	44.26
1931	30.68	28.71	40.61
1941	37.89	27.81	34.30
1951	44.14	25.83	30.01
1961	50.57	28.35	21.08
1971	55.82	27.63	16.55
1981	60.46	25.84	13.70

Graph 1

Share of Large Cities, and Medium and Small Towns
in Total Urban Population, 1901–81



12. There are several publications which analyse the urban population growth and distribution by size classes and regions. We have, therefore, limited the analysis of these two variables to a bare minimum in this study. The analysis of the existing pattern by population growth rates is, however, extensive, this being the main thrust of the NCU's contract study.

No less important is the fact that the hegemony of large cities whichever way it is looked at, has not shown any signs of tapering off. According to a simple size class analysis, the population growth rate of +100,000 urban centres during this decade was placed at 54.17 per cent. In comparison, the medium-sized towns registered in aggregate a growth rate of 40.88 per cent, and small towns, an even lower rate of 26.56 per cent.

Results do not change when the growth rates are computed by holding the size class constant in the base year, in this case, the year 1971. The growth rate for large city size class works out to 41.51 per cent, and 35.92 per cent for the small towns size class.

TABLE 3
Population Growth Rates by Size Class of Urban Centres 1971-81

Size Class	Per cent growth rates*	
	Method 1	Method 2
Large (+100,000)	54.17	41.51
Medium (20,000—100,000)	40.88	38.23
Small (<20,000)	26.56	35.92
Total	46.24	39.79

*Method 1 computes growth rates by using a simple size class analysis. Method 2 computes growth rates by holding the size class constant in the base year.

respective of the values and norms that one might attach with the pattern of urban growth, that is, view it positively or in a negative light, the fact remains that the distribution of urban population has changed dramatically in favour of the large city size class

(+100,000). Population growth rates and size class have moved in the same direction, contributing significantly to the imbalances in the distribution of urban population.

2. Regional Analysis

Regional distribution of the 1981 urban population is given to Table 4 below. Like in the case of the size class variations, there are wide variations in the regional distribution of urban population with several states having significantly larger shares in urban populations as well as higher levels of urbanisation and population growth rates. Maharashtra, for instance, accounted for in 1981, 13.77 per cent of the country's total urban population. Its share in the total number of urban centres was 8.36 per cent and in total population, it was 9.16 per cent. Tamil Nadu was also in a somewhat similar position; with a share of 7.06 per cent in total population and 7.42 per cent in the total number of urban centres, it accounted for 9.99 per cent of the total urban population, displaying a high coefficient of urban population concentration (1.43).

The table below shows that nearly 50 per cent of the country's total urban population is concentrated in six most-urbanised states of the country, these being, Maharashtra, Tamil Nadu, Gujarat, Karnataka, Punjab and West Bengal. Together these states account for about one-third of the country's total population. On the other hand, there are states where urban population concentration is low. In Bihar, the urban population coefficient of concentration was 0.53; in Orissa, it worked out to just 0.50, while in Uttar Pradesh, it was 0.77.

TABLE 4
Regional (State) Distribution of Urban Centres and Urban Population, 1981

States	Number of urban centres	Urban population (million)	Level of urbanisation (%)	Share of each state in urban population (%)	Urban population growth rate 1971-81 (%)
Andhra Pradesh	234	12.49	23.32	7.82	48.62
Bihar	179	8.72	12.47	5.46	54.76
Gujarat	220	10.60	31.10	6.64	41.42
Haryana	77	2.83	21.88	1.77	59.47
Himachal Pradesh	46	0.32	7.61	0.20	34.76
Jammu & Kashmir	56	1.26	21.05	0.79	46.86
Karnataka	250	10.73	28.89	6.72	50.65
Kerala	85	4.77	18.74	2.99	37.64
Madhya Pradesh	303	10.59	20.29	6.63	56.03
Maharashtra	276	21.99	35.03	13.77	39.99
Manipur	32	0.37	26.42	0.24	165.36
Meghalaya	7	0.24	18.07	0.15	63.98
Nagaland	7	0.12	15.52	0.08	133.95
Orissa	103	3.11	11.79	1.95	68.54
Punjab	134	4.65	27.68	2.91	44.51
Rajasthan	195	7.21	21.05	4.51	58.69
Sikkim	8	0.05	16.15	0.03	159.73
Tamil Nadu	245	15.95	32.95	9.99	27.98
Tripura	10	0.22	10.99	0.14	38.93
Uttar Pradesh	659	19.90	17.95	12.46	60.62
West Bengal	130	14.45	26.47	9.04	31.73
Union Territories	45*	7.10	—	5.71*	—
Total	3301	157.68	23.70	100.00	46.24

*These represent the shares of Union Territories and Goa, Arunachal Pradesh and Mizoram.

Equally wide variations are noted in the regional levels of urbanisation. In 1981, the urbanisation levels of 15 out of the 24 major states were below the national aggregate of 23.70 per cent. Among them featured Bihar (12.47 per cent), Orissa (11.79 per cent), and Uttar Pradesh (17.95 per cent). What is important to note is that these states have so far not been able to reach even the 1961 national urbanisation level of 18.32 per cent. As opposed to these low urbanised states are those (e.g., Maharashtra, 35.03; Tamil Nadu, 32.95; and Gujarat, 31.10) which have maintained their ranks in the national urban hierarchy.

Wide variations in the urban population growth rates particularly during the 1971-81 decade are also noted from the above table. According to the table, the urban population growth rates reached a high of over 60 per cent, as in the case of Orissa (68.54 per cent) and Uttar Pradesh (60.62 per cent), and plummeted to a low of 27.98 per cent in Tamil Nadu, and of 31.73 per cent in West Bengal. Maharashtra and Gujarat also recorded below national average growth rates during the last census decade.

The rankings of states in terms of the levels of urbanisation have, however, not shown any noticeable change even though, as indicated above as well as in the table, some of the low-urbanised states (Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh) registered acceleration in the urban population

growth rates and the high-urbanised states experienced relatively low growth rates.¹³

This state of the facts imply that firstly, the imbalances in the regional distribution of urban population are appreciable and continue to persist and secondly, regional distribution of urban population can not be altered in a shorter span of time. A much longer time frame is needed to influence the population distribution patterns.

Imbalances in the spatial spread of urban population is a feature not only of states; these are equally, if not more, pronounced at the level of the districts. An examination of the relevant data would show that while the number of the entirely urban (6) and entirely rural districts (10) is small, there are 114 or approximately 29 per cent of the total number of districts which have extremely low levels of urbanisation. In 1981, the urbanisation level of these districts was less than 10 per cent. The extent of inequality in the distribution pattern can be further assessed by the fact that 56 per cent of the total number of districts had not been able to reach in 1981, even the 1951 level of urbanisation. At the other end were 18 districts which had over 50 per cent of their population living in urban areas, and another 35 districts (8.71 per cent of the total) whose levels ranged between 33.34 and 49.99 per cent. It is significant to note that a majority of the low-urbanised districts happen to be the characteristic of the low-income states.

TABLE 5

Distribution of Districts by their Levels of Urbanisation, 1981¹⁴
Levels of Urbanisation, (%)

	More than 50	33.34 to 44.99	23.71 to 33.33	10 to 23.70	Less than 10	Total
Number of districts	18	35	62	173	114	402*
Percentage to total	4.48	8.71	15.42	43.03	28.36	100.00

*Ten entirely rural districts have not been taken into account.

All this data leave no doubt about the existence of serious imbalances in the distribution of urban population by states and districts. The spread of urban growth has been uneven and confined to a limited number of states and districts. Six states, as pointed out earlier, account for nearly 50 per cent of the country's total urban population, leaving rest of the states in the country to share the balance. Similarly, 25 per cent of the districts had in 1981 about 68 per

cent of the total urban population, which raise some basic questions about the distribution pattern: are such imbalances inevitable in the early stages of country's economic development? Does this pattern lend support to the theory that development does not take place everywhere at the same time, and that it is space selective? And, does this pattern of growth present a cause for concern, and calls for intervention?

13. For details on the rankings of the various states, see, National Institute of Urban Affairs, *State of India's Urbanisation*, New Delhi, 1988.

14. A further break-up of this data by states can be seen in *State of India's Urbanisation*, Ibid.

3. Fast Growing, Moderately Growing and Slow Growing Towns An Analysis of Growth Patterns

According to the 1981 census, there were 3301 urban centres of which 881 were new towns in the sense of their having attained the urban status for the first time. Of the 2420 towns which existed in both 1971 and 1981 census, 568 experienced relatively high population growth rates which exceeded the overall national average of 46.24 per cent. These experienced net immigrations on a significant scale. Many recorded extraordinarily high growth rates of

over 100 per cent. On the other end of the scale were 487 towns which managed to barely achieve a growth rate of 20 per cent.¹⁵ Many even lost population in absolute terms. The balance of 1365 towns registered moderate growth rate which ranged between 20 and 46.24 per cent. The fast growing towns accounted for 23.47 of the total number which existed in both the censuses; the share of the slow growing towns was 20.12 per cent, while the moderately growing towns claimed the highest proportion of 56.40 per cent in the total. Table 6 gives the composition of towns by their growth rate characteristics.

TABLE 6
Distribution of the Various Categories of Towns by Growth Rates, 1971-81

Category of towns	Per cent growth rates, 1971-81*						
	Negative	Less than 10	10 to 20	20 to 46.25	46.24 to 75.00	75.00 to 100.00	100 and more
Fast growing towns					408 (16.9)	76 (3.1)	84 (3.5)
Moderately growing towns				1365 (56.4)			
Slow growing towns	44 (1.8)	117 (4.8)	326 (13.5)				

Note : Figures in parenthesis are the percentage of towns in each category to the total number of towns which existed in the census decades of 1971 and 1981.

Like the earlier analysis, we have analysed the growth and distribution pattern of the fast growing, moderately growing, and slow growing towns with a view to determine whether these are a characteristic of any particular size class, or region or subregion; whether their distribution is balanced or imbalanced;

and whether there is any regularity or consistency in the pattern of their growth and distribution. A series of tables have been prepared for purposes of this analysis, with Table 7 giving the distribution of the various categories of towns by their size class.

15. The average natural growth rate (birth minus deaths) for urban population during 1971-81 was placed at 19.24 per cent. Taking into account the under-reporting particularly in the birth rates, this rate has been averaged at 20 per cent. See, Registrar General of India, *Sample Registration Bulletin*, December 1984 New Delhi.

TABLE 7

Distribution of towns by Population size Class, 1981

Size class	Towns that existed in 1971 and 1981							
	Total		Fast Growing		Moderately Growing		Slow Growing	
	Number	%	Number	%	Number	%	Number	%
More than 1 Million	12	0.50 (100.00)	4	0.70 (33.33)	8	0.59 (66.67)	0	0.00 (0.00)
500,000—1 million	30	1.24 (100.00)	13	2.29 (43.33)	16	1.17 (53.33)	1	0.21 (3.33)
100,000—500,000	176	7.27 (100.00)	64	11.27 (36.36)	104	7.62 (59.09)	8	1.64 (4.55)
50,000—100,000	269	11.12 (100.00)	100	17.60 (37.17)	144	10.55 (53.33)	25	5.13 (9.29)
20,000—50,000	701	28.97 (100.00)	181	31.87 (25.82)	418	30.62 (59.63)	102	20.94 (14.55)
10,000—20,000	802	33.14 (100.00)	142	25.00 (17.71)	472	34.58 (58.85)	188	38.60 (23.44)
5,000—10,000	328	13.55 (100.00)	44	7.75 (13.41)	175	12.82 (53.35)	109	22.38 (33.23)
Less than 5,000	102	4.21 (100.00)	20	3.52 (19.61)	28	2.05 (27.45)	54	11.09 (52.94)
Total	2420	100.00	568	100.00	1365	100.00	487	100.00

Note : Figures in parenthesis are the percentage of the each category of towns to the total number in each size class.

A size class shows that the fast and slow growing towns as also the moderately growing towns are widely distributed among different size classes, and that they are not the exclusive feature of any particular size class, with only one exception which is that there is no slow growing town in the million plus population category. There is, however, a noticeable concentration of the fast growing towns in population size classes of 20,000 and above, and of the slow growing towns in lower population size classes. As the table shows, 31.9 per cent of the fast growing towns had populations exceeding 50,000, and 33.5 per cent of the slow growing towns had populations of less than 10,000. The largest number of the fast growing towns happened to be in the population range of 20,000—50,000, and the slow growing towns in the size class of 10,000—20,000. The median population size of a fast growing town was in the proximity of 43,000; that of a moderately growing town about 16,000, and of a slow growing town, a little over 14,000.

The same table giving the percentage of the different categories of towns to the total number of towns in individual size class further supports the conclusion reached above. It shows that of the 218 large cities (+10,000 size class), 81 or 37.2 per cent were in the category of "fast growing", 128 or 58.7 per cent. "moderately growing", and only 9 (or 4.1 per cent) were "slow growing". In lower size classes, the proportions of the slow growing towns were higher. of the 1232 towns with less than 20,000 population, 351 or 28.5 per cent were reported to be slow growing; 675 or 54.8 per cent had registered moderate growth rates and only 188 (15.2 per cent) had achieved higher than the national average growth rate of 46.24 per cent.

Just as there are imbalances in the distribution of these towns among different size classes, in the same manner, there are noticeable imbalances in the pattern of their distribution among different states. In fact, the regional distribution of these towns is far more skewed as may be seen in tables 8 to 11 and the attached maps.

TABLE 8
Distribution of the fast and Slow Growing towns by States, 1981

States/Union Territories	Number of towns							
	Total		Fast growing		Moderately growing		Slow growing	
	Number (1981)	% to total	Number	% to total	Number	% to total	Number	% to total
Andhra Pradesh	205	8.47	77	13.56	100	7.33	28	5.75
Arunachal Pradesh	4	0.16	3	0.53	1	0.07	0	0.00
Bihar	149	6.16	61	10.74	75	5.49	13	2.67
Gujarat	191	7.89	20	3.52	115	8.42	56	11.50
Goa	11	0.45	2	0.35	8	0.59	1	0.21
Haryana	60	2.43	15	2.64	33	2.42	12	12.46
Himachal Pradesh	35	1.45	5	0.88	14	1.02	16	3.29
Jammu & Kashmir	42	1.73	8	1.41	24	1.76	10	2.05
Karnataka	216	8.92	41	7.22	137	10.04	38	7.80
Kerala	46	1.90	13	2.29	12	0.88	21	4.31
Madhya Pradesh	228	9.42	61	10.74	146	10.69	21	4.31
Maharashtra	245	10.12	35	6.16	137	10.04	73	14.99
Manipur	8	0.33	6	1.06	2	0.15	0	0.00
Meghalaya	3	0.12	1	0.18	2	0.15	0	0.00
Mizoram	2	0.08	2	0.35	0	—	0	0.00
Nagaland	3	0.12	2	0.35	0	—	1	0.21
Orissa	76	3.14	25	4.40	44	3.22	7	1.44
Punjab	104	4.30	24	4.23	57	4.18	23	4.72
Rajasthan	151	6.24	42	7.39	100	7.32	9	1.85
Sikkim	8	0.33	6	1.06	2	0.15	0	0.00
Tamil Nadu	227	9.38	12	2.11	101	7.40	114	23.41
Tripura	6	0.25	0	0.00	3	0.22	3	0.62
Uttar Pradesh	280	11.57	72	12.68	188	13.77	20	4.11
West Bengal	111	4.59	30	5.28	61	4.47	20	4.11
Andaman & Nicobar	1	0.04	1	0.18	0	—	0	0.00
Chandigarh	1	0.04	1	0.18	0	—	0	0.00
Dadra & Nagar Haveli	0	—	0	0.00	0	—	0	0.00
Delhi	1	0.04	1	0.18	0	—	0	0.00
Daman & Diu	2	0.08	0	0.00	2	0.15	0	0.00
Lakshadweep	0	—	0	0.00	0	—	0	0.00
Pondicherry	4	0.16	2	0.35	1	0.07	1	0.21
India	2420	100.00	568	100.00	1365	100.00	487	100.00

Source : Census of India, 1981.

The table together with the maps exhibit a fairly high degree of concentration of the fast growing towns in Andhra Pradesh and Bihar, and a slightly lesser degree of concentration in Madhya Pradesh, Rajasthan and Uttar Pradesh. The shares of these states in slow growing towns are correspondingly small. On the other hand, the slow growing towns display a high degree of concentration in Maharashtra, Gujarat and Tamil Nadu; together, these account for nearly 50 per cent of the total number of slow growing towns in the country. Tamil Nadu alone accounts for almost one-fourth of them.

Further analysis of the same data shows that the fast growing towns are concentrated in low urbanised states (Table 9), while the slow growing towns are localised in high-urbanised states (Table 11). An appreciable percentage of the moderately growing towns also appear to be localised in the low-income states (Table 10). When arranged according to the

states' urban population growth rates, the fast growing towns demonstrate a tendency to concentrate in fast-urbanising states (that is, those which registered during 1971-81 a growth rate in excess of 46.24 per cent), and the slow growing towns in slow-urbanising states.

TABLE 9
Distribution of Fast Growing Towns by States Levels of Urbanisation, 1981 and Urban Population Growth Rate, 1971-81

Urban Growth rate 1971-81	Levels of urbanisation, 1981	
	Higher than the national average (23.7+)	Lower than the national average (23.7-)
Higher than the national average (46.24+)	56 (9.87)	373 (65.67)
Lower than the national average (46.24-)	121 (21.30)	18 (3.16)

TABLE 10

Distribution of Slow Growing Towns by States Levels of Urbanisation, 1981 and Urban Population Growth Rates, 1971-81

Urban Growth rate 1971-81	Levels of Urbanisation, 1981	
	Higher than the national average (23.7+)	Lower than the national average (23.7-)
Higher than the national average (46.24+)	40 (8.21)	121 (24.85)
Lower than the national average (46.24-)	286 (58.73)	40 (8.21)

TABLE 11

Distribution of Moderately Growing Towns by States Levels of Urbanisation, 1981 and Urban Population Growth Rate, 1971-81

Urban Growth rate 1971-81	Levels of urbanisation, 1981	
	Higher than the national average (23.7+)	Lower than the national average (23.7-)
Higher than the national average (46.24+)	148 (10.84)	713 (52.23)
Lower than the national average (46.24-)	473 (34.65)	31 (2.27)

This pattern of distribution of the fast and slow growing towns is extremely significant in as much it marks a break from the generally-held view that the fast growing towns are a characteristic of the most urbanised and high income states, and the slow-growing towns, a peculiarity of the least-urbanised and low-income states.¹⁶ In order to ascertain whether the pattern of distribution as observed during 1971-81 was a new phenomenon or whether it represented a continuation of the trends observed in the earlier decade, we have looked at the pattern for two decades, namely 1961-71 and 1971-81.

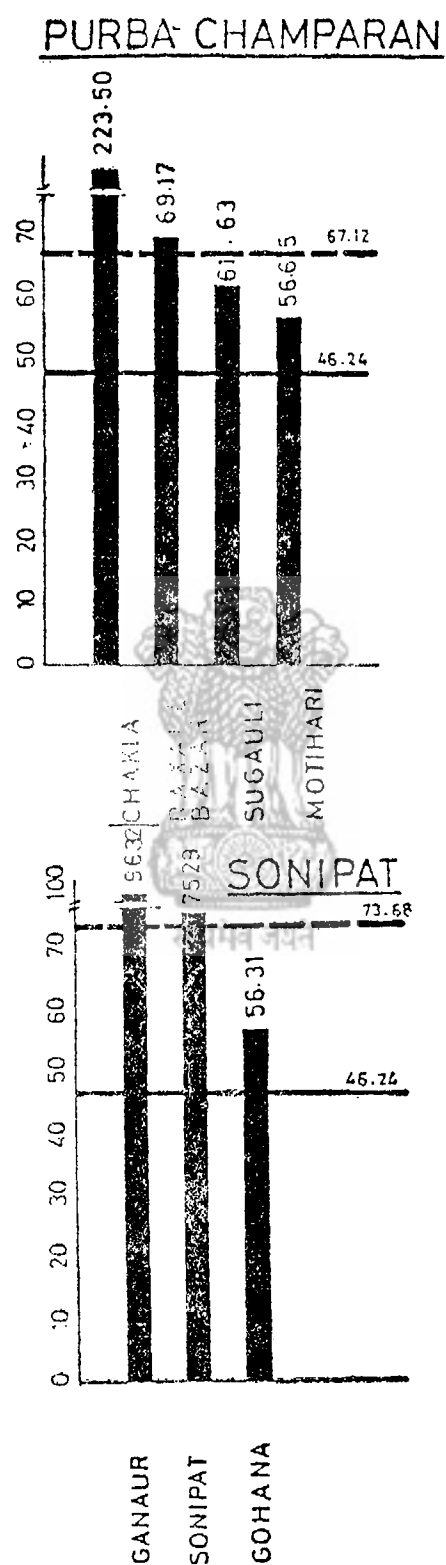
An examination of the data for these two decades shows that the number of the consistently fast growing and consistently slow growing towns is small; only 240 out of the 568 fast growing towns of the 1981 census reported achieving higher than the national urban population growth rates consequentially for two decades (Map 5). For the rest, the growth rate was less than the national average. Similarly, the number of the consistently slow growing towns was 214 out of 487 towns. In many cases, the growth rates improved between 1961-71 and 1971-81; in others, the growth rates showed a perceptible decline between the two census decades. Many experienced highly irregular growth rates, as shown in attached sample graphs.

Perhaps a far more significant feature of the analysis of this set of data is that in proportionate terms, there was concentration of the consistently fast growing towns in the most-urbanised and more developed states which included Gujarat, Maharashtra and Tamil Nadu. Their concentration coefficients worked out to be 1.18, 1.68 and 1.38 respectively. Many other states which included Madhya Pradesh (1.39) and Orissa (1.13) also showed trends towards concentration of the consistently fast growing towns. On the other hand, there was little regularity about the pattern of concentration of the slow growing towns. In relative terms, there was concentration of the consistently slow growing towns in Haryana (1.70) and Punjab (1.68), the two states that have enjoyed consistently high per capita net domestic product. (see tables annexed with this chapter).

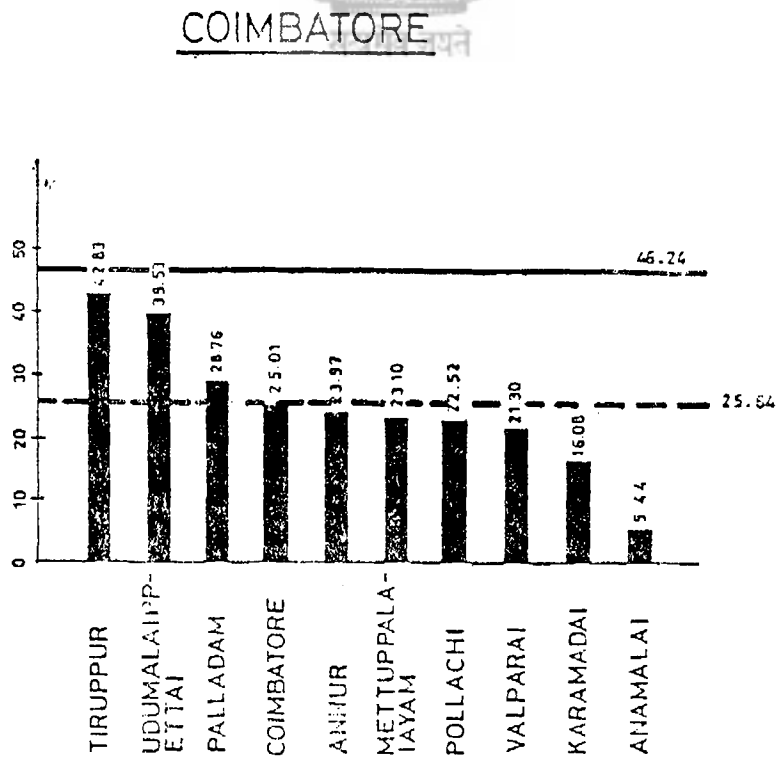
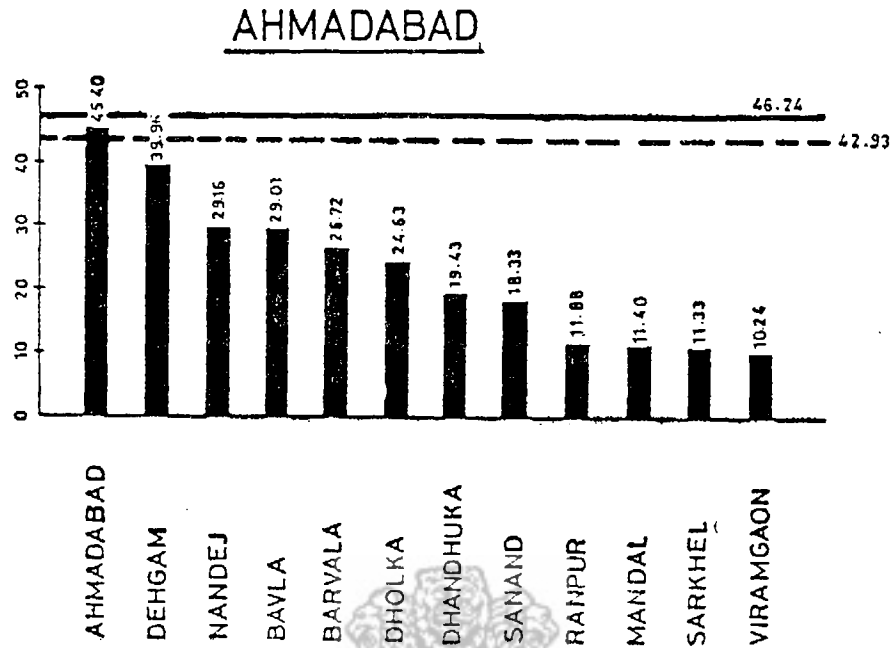
The fast and slow growing towns are distributed more or less the same way among districts, with as many as 114 fast growing towns (37 per cent of the total) being located in most urbanised districts. Only four out of the 568 towns are located in low growth districts. The pattern with respect to the slow growing towns is, however, less evident even though one-fourth of them happens to be located in high growth districts. A majority of them are located in districts which registered during 1971-81 a growth rate ranging between 20 and 46.24 per cent.

16. The entire pattern of concentration of the fast growing and slow growing towns thus presents a number of interesting possibilities and hypotheses. For instance, the relatively high concentration of the slow growing towns in most urbanised states raises the issue whether these states are beginning to reach a plateau in their levels of urbanisation, or whether it reflects in any way the redistribution of the economic development processes in favour of the least urbanised states. Could it be on account of the lower birth rates which characterised at least two of the high-urbanised states, namely Maharashtra, 26.97 per 1000 population, and Tamil Nadu, 25.83 per 1000 population. The 'natural' urban growth rates of these two states were 18.47 and 16.95 respectively as compared to the national urban average of 19.24 per 1000 persons. Could it be due to the net outmigration from some of the states? Could the relatively high concentration of the fast growing towns in Bihar, Madhya Pradesh and Uttar Pradesh be explained by high birth rates? Or, was the phenomenon due to new agricultural or industrial activity as contended by the National Commission of Urbanisation.

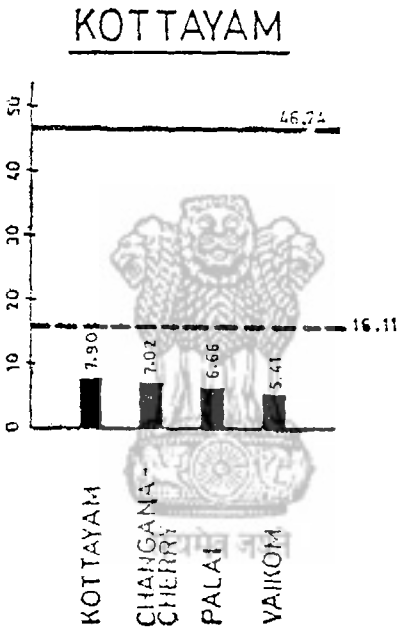
Graph 2
Samples of Districts with All Fast Growing Towns



Graph 3
Samples of Districts with All Moderately Growing
Towns



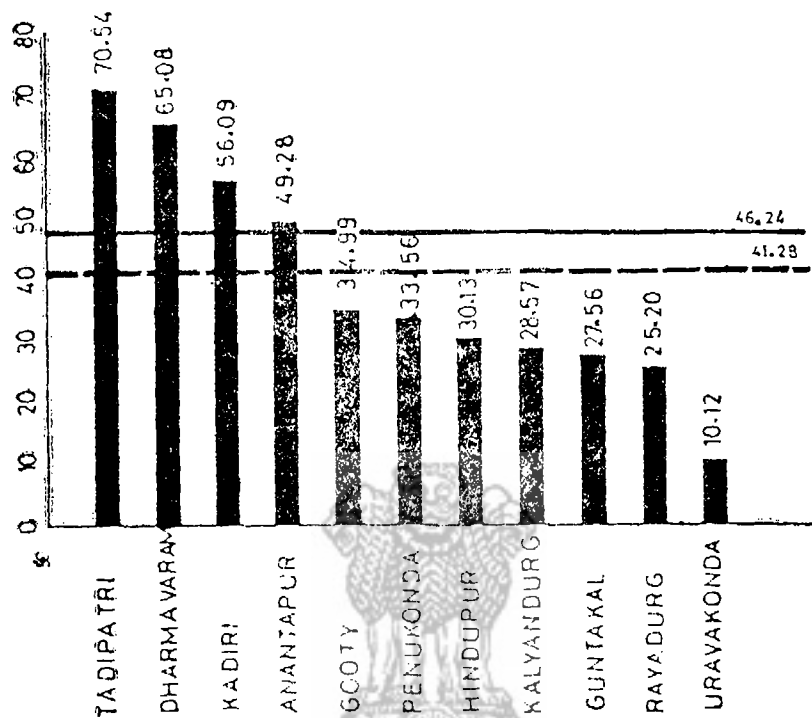
Graph 4
Samples of Districts with All Slow Growing Towns



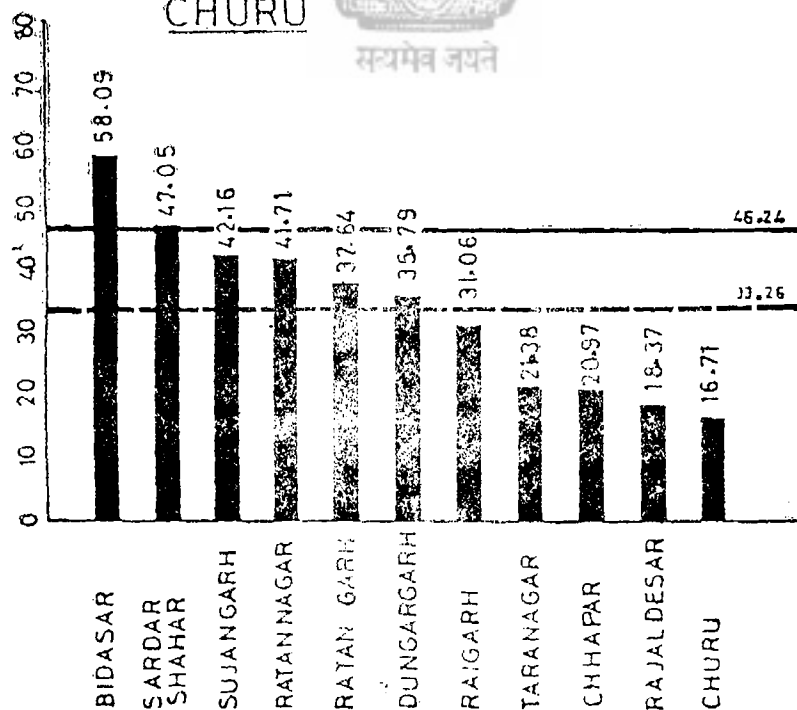
Graph 5

Samples of Districts with Fast, Moderately and Slow Growing Towns

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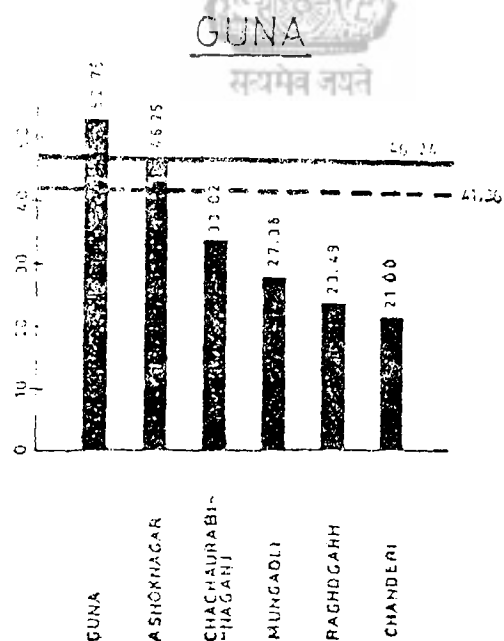
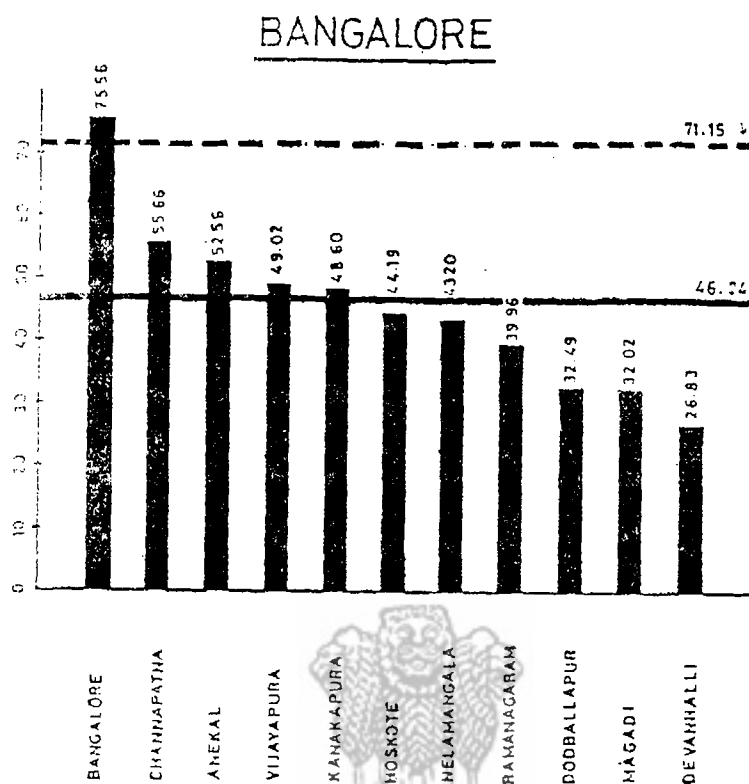


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Graph 6

Samples of Districts with Fast and Moderately Growing Towns



Graph 7

Samples of Districts with Fast and Slow Growing Towns

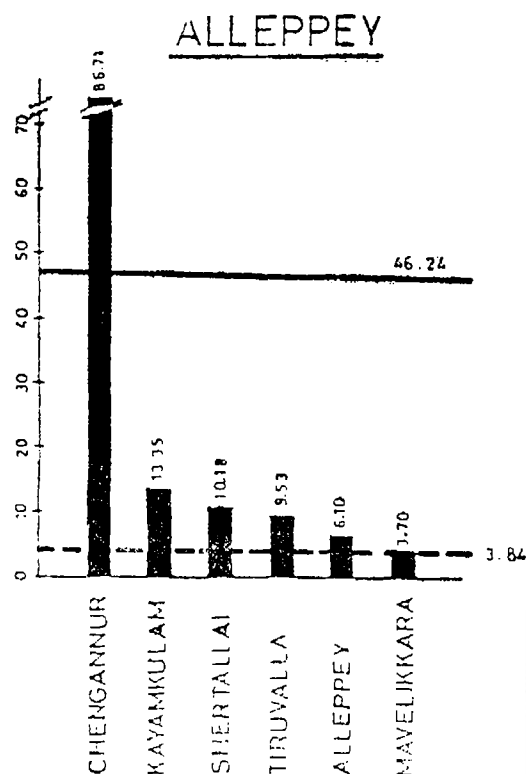


TABLE 12

Distribution of Fast and Slow Growing Towns by the Urban Population Growth Rate of Districts of their location, 1971-81

Urban population growth rate of districts, 1971-81	Fast growing towns		Slow growing towns	
	Number	%	Number	%
Low growth (less than 20%)	4	0.70	38	7.80
Moderate growth (20-46.24%)	171	30.11	331	67.97
High growth (more than 46.24%)	393	69.19	118	24.23
Total	568	100.00	487	100.00

Several conclusions can be drawn from the preceding analysis of which the one that stands out overwhelmingly is that there are serious imbalances in the pattern of urban population growth and distribution. Almost the entire analysis testifies the existence of such imbalances. In terms of size class distribution, the share of the higher size classes has escalated with every successive decade to the extent that the smaller size classes stand displaced from the position that they once enjoyed in India's economy. The relatively high-income states have significantly larger shares of country's urban population, almost suggesting that economic development including urban growth forces have remained confined to the already developed areas and regions. The *inter-se* positions of states in the urban hierarchy have not shown any appreciable changes. There are no genuine signals of any changes in the pattern of urban population distribution.



ANNEXURE 1 OF SECTION II

Different Categories of Towns by Size Classes, 1981

Class	Population Size	Total		Fast growing		Slow Growing		Moderate growing		New towns	
		Num-ber	Popula-tion	Num-ber	Popula-tion	Num-ber	Popula-tion	Num-ber	Popula-tion	Num-ber	Popula-tion
Ia %age	1,000,000+	12	42121700 26.71	4	11352303 23.87	0	0 0.00	8	30769397 33.53	0	0 0.00
Ib %age	500,000—1,000,000	30	19832474 12.58	13	8837061 18.58	1	747318 7.40	16	10248095 11.17	0	0 0.00
Ic %age	100,000—500,000	176	33378934 21.17	64	12467429 26.21	8	1080837 10.70	104	19830668 21.61	0	0 0.00
II %age	50,000—100,000	270	18189728 11.54	100	6633944 13.95	25	1650325 16.34	144	9829057 10.71	1	76402 0.92
III %age	20,000—50,000	743	22557147 14.31	181	5724773 12.04	102	2964175 29.34	418	12703367 13.84	42	1164832 14.10
IV %age	10,000—20,000	1059	15006860 9.52	142	2127423 4.47	188	2650767 26.24	472	6883567 7.50	257	3345103 40.48
V %age	5,000—10,000	758	5740603 3.64	44	361660 0.76	109	825359 8.17	175	1404936 1.53	430	3148648 38.11
VI %age	Below 5,000	253	852725 0.54	20	54616 0.11	54	183700 1.82	28	86729 0.09	151	527680 6.39
Total %age		3301	157680171 100.00	568	47559209 100.00	487	10102481 100.00	1365	91755816 100.00	881	8262665 100.00

Note : Excluding Assam

Source : Census of India, 1981



ANNEXURE 2 OF SECTION II

India : Statewise Distribution of Fast Growing Towns of 1971-81 by Size Classes, 1981

State/U.T./India	Fast Growing								Total
	Ia	Ib	Ic	II	III	IV	V	VI	
Andhra Pradesh	0	2	9	19	33	13	1	0	77
Arunachal Pradesh	0	0	0	0	0	0	3	0	3
Bihar	0	4	6	11	21	16	3	0	61
Gujarat	0	2	2	5	4	7	0	0	20
Goa	0	0	0	1	0	1	0	0	2
Haryana	0	0	5	2	3	3	1	1	15
Himachal Pradesh	0	0	0	0	0	0	3	2	5
Jammu & Kashmir	0	0	0	0	0	2	2	4	8
Karnataka	1	0	7	6	14	7	4	2	41
Kerala	0	0	2	1	10	0	0	0	13
Madhya Pradesh	0	2	2	18	9	25	4	1	61
Maharashtra	1	1	9	3	10	9	1	1	35
Manipur	0	0	1	0	2	3	0	0	6
Meghalaya	0	0	0	0	1	0	0	0	1
Mizoram	0	0	0	1	0	1	0	0	2
Nagaland	0	0	0	0	2	0	0	0	2
Orissa	0	0	3	6	8	6	2	0	25
Punjab	0	1	1	3	9	3	7	0	24
Rajasthan	1	1	3	5	16	13	2	1	42
Sikkim	0	0	0	0	1	0	0	5	6
Tamil Nadu	0	0	1	2	5	3	1	0	12
Tripura	0	0	0	0	0	0	0	0	
Uttar Pradesh	0	0	6	11	22	21	9	3	72
West Bengal	0	0	5	6	9	9	1	0	30
Andaman & Nicobar	0	0	0	0	1	0	0	0	1
Chandigarh	0	0	1	0	0	0	0	0	1
Dadra & Nagar Haveli	0	0	0	0	0	0	0	0	0
Delhi	1	0	0	0	0	0	0	0	1
Daman & Diu	0	0	0	0	0	0	0	0	0
Lakshadweep	0	0	0	0	0	0	0	0	0
Pondicherry	0	0	1	0	1	0	0	0	2
India	4	13	64	100	181	142	44	20	568

Note : Excluding Assam

Population Size Classes of Towns

Ia	1,000,000+	Ib	500,000—1,000,000
Ic	100,000—500,000		50,000—100,000
III	20,000—50,000		10,000—20,000
V	5,000—10,000	VI	Below 5,000

Source : Census of India, 1981

ANNEXURE 3 OF SECTION II

India : Statewise-Distribution of Moderately Growing Towns of 1971-81 by Size Classes, 1981

State/U.T./India	Moderately Growing								Total
	Ia	Ib	Ic	II	III	IV	V	VI	
Andhra Pradesh	1	0	7	11	42	35	4	0	100
Arunachal Pradesh	0	0	0	0	0	0	0	1	1
Bihar	0	0	6	8	30	25	6	0	75
Gujarat	1	0	8	16	28	42	20	0	115
Goa	0	0	0	2	1	1	0	4	8
Haryana	0	0	5	2	10	7	9	0	33
Himachal Pradesh	0	0	0	1	1	3	3	6	14
Jammu & Kashmir	0	1	1	0	5	2	10	5	24
Karnataka	0	1	8	5	39	62	19	3	137
Kerala	0	3	2	2	5	0	0	0	12
Madhya Pradesh	0	2	8	9	30	64	33	0	146
Maharashtra	2	1	11	14	52	40	17	0	137
Manipur	0	0	0	0	0	0	1	1	2
Meghalaya	0	0	1	0	0	1	0	0	2
Mizoram	0	0	0	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0	0	0	0
Orissa	0	0	3	1	12	23	4	1	44
Punjab	0	1	4	6	14	21	9	2	57
Rajasthan	0	0	6	5	35	45	9	0	100
Sikkim	0	0	0	0	0	0	0	2	2
Tamil Nadu	1	4	11	25	33	20	6	1	101
Tripura	0	0	1	0	1	1	0	0	3
Uttar Pradesh	2	3	17	25	57	62	21	1	188
West Bengal	1	0	5	12	22	17	3	1	61
Andaman & Nicobar	0	0	0	0	0	0	0	0	0
Chandigarh	0	0	0	0	0	0	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0	0	0	0	0
Delhi	0	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	1	0	1	0	2
Lakshadweep	0	0	0	0	0	0	0	0	0
Pondicherry	0	0	0	0	0	1	0	0	1
India	8	16	104	144	418	472	175	28	1365

Note : Excluding Assam

Population Size Classes of Towns

Ia	1,000,000+	Ib	500,000—1,000,000
Ic	100,000—500,000	II	50,000— 100,000
III	20,000— 50,000	IV	10,000— 20,000
V	5,000— 10,000	VI	Below 5,000

Source : Census of India, 1981

ANNEXURE 4 OF SECTION II

India : Statewise Distribution of Slow Growing Towns of 1971-81 by Size Classes, 1981

State/U.T./India	Slow Growing								Total
	Ia	Ib	Ic	II	III	IV	V	VI	
Andhra Pradesh	0	0	1	0	10	8	7	2	28
Arunachal Pradesh	0	0	0	0	0	0	0	0	0
Bihar	0	0	0	0	3	6	2	2	13
Gujarat	0	0	0	2	14	26	12	2	56
Goa	0	0	0	0	0	0	1	0	1
Haryana	0	0	1	1	0	4	5	1	12
Himachal Pradesh	0	0	0	0	1	2	3	10	16
Jammu & Kashmir	0	0	0	0	0	1	1	8	10
Karnataka	0	0	0	0	9	13	8	8	38
Kerala	0	0	1	4	15	1	0	0	21
Madhya Pradesh	0	0	0	1	1	7	11	1	21
Maharashtra	0	0	0	3	14	34	14	8	73
Manipur	0	0	0	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0	0	0	0
Nagaland	0	0	0	0	0	1	0	0	1
Orissa	0	0	0	0	1	2	4	0	7
Punjab	0	0	0	1	3	9	6	4	23
Rajasthan	0	0	0	1	0	5	3	0	9
Sikkim	0	0	0	0	0	0	0	0	0
Tamil Nadu	0	0	3	10	25	53	19	4	114
Tripura	0	0	0	0	0	3	0	0	3
Uttar Pradesh	0	1	1	0	2	6	7	3	20
West Bengal	0	0	1	2	4	7	5	1	20
Andaman & Nicobar	0	0	0	0	0	0	0	0	0
Chandigarh	0	0	0	0	0	0	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0	0	0	0	0
Delhi	0	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0	0
Lakshadweep	0	0	0	0	0	0	0	0	0
Pondicherry	0	0	0	0	0	0	1	0	1
India	0	1	8	25	102	188	109	54	487

Note : Excluding Assam

Population Size Classes of Towns

Ia 1,000,000+

Ic 100,000—500,000

III 20,000—50,000

V 5,000—10,000

Ib 500,000—1,000,000

II 50,000—100,000

IV 10,000—20,000

VI Below 5,000

Source : Census of India, 1981

ANNEXURE 5 OF SECTION II

India : Statewise Distribution of Consistently Fast Growing Towns of 1971-81 by Size Classes, 1981

State/UTs.	Fast Growing								Total
	Ia	Ib	Ic	II	III	IV	V	VI	
Andhra Pradesh	0	2	5	13	19	1	0	0	40
Arunachal Pradesh	0	0	0	0	0	0	0	0	0
Bihar	0	3	0	3	4	3	0	0	13
Gujarat	0	2	1	1	3	3	0	0	10
Goa	0	0	0	1	0	1	0	0	2
Haryana	0	0	3	2	2	1	1	0	9
Himachal Pradesh	0	0	0	0	0	0	1	0	1
Jammu & Kashmir	0	0	0	0	0	1	2	1	4
Karnataka	0	0	5	4	5	3	1	0	18
Kerala	0	0	1	0	2	0	0	0	3
Madhya Pradesh	0	2	2	15	7	9	1	0	36
Maharashtra	1	1	8	3	6	5	1	0	25
Manipur	0	0	1	0	0	0	0	0	1
Meghalaya	0	0	0	0	1	0	0	0	1
Mizoram	0	0	0	1	0	0	0	0	1
Nagaland	0	0	0	0	2	0	0	0	2
Orissa	0	0	3	4	5	0	0	0	12
Punjab	0	1	0	1	1	1	0	0	4
Rajasthan	1	1	3	3	7	4	1	0	20
Sikkim	0	0	0	0	1	0	0	0	1
Tamil Nadu	0	0	1	2	3	1	0	0	7
Tripura	0	0	0	0	0	0	0	0	0
Uttar Pradesh	0	0	2	3	4	4	1	2	16
West Bengal	0	0	4	2	3	1	0	0	10
Andaman & Nicobar	0	0	0	0	1	0	0	0	1
Chandigarh	0	0	1	0	0	0	0	0	1
Dadra & Nagar Haveli	0	0	0	0	0	0	0	0	0
Delhi	1	0	0	0	0	0	0	0	1
Daman & Diu	0	0	0	0	0	0	0	0	0
Lakshadweep	0	0	0	0	0	0	0	0	0
Pondicherry	0	0	1	0	0	0	0	0	1
India	3	12	41	58	76	38	9	3	240

Note : Excluding Assam

Source : Census of India, 1981

ANNEXURE 6 OF SECTION II

India : Statewise Distribution of Consistently Slow Growing Towns of 1971-81 by Size Classes, 1981

State/UT's	Slow Growing								Total
	Ia	Ib	Ic	II	III	IV	V	VI	
Andhra Pradesh	0	0	0	0	6	4	3	0	13
Arunachal Pradesh	0	0	0	0	0	0	0	0	0
Bihar	0	0	0	0	0	2	1	1	4
Gujarat	0	0	0	0	7	11	3	2	23
Goa	0	0	0	0	0	0	0	0	0
Haryana	0	0	1	1	0	4	3	0	9
Himachal Pradesh	0	0	0	0	0	0	3	7	10
Jammu & Kashmir	0	0	0	0	0	1	0	0	1
Karnataka	0	0	0	0	3	6	4	4	17
Kerala	0	0	1	2	9	1	0	0	13
Madhya Pradesh	0	0	0	0	1	3	2	0	6
Maharashtra	0	0	0	0	10	13	5	5	33
Manipur	0	0	0	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0	0	0	0
Mizoram	0	0	0	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0	0	0	0
Orissa	0	0	0	0	0	1	1	0	2
Punjab	0	0	0	1	3	5	6	2	17
Rajasthan	0	0	0	0	0	3	1	0	4
Sikkim	0	0	0	0	0	0	0	0	0
Tamil Nadu	0	0	0	4	5	25	8	4	46
Tripura	0	0	0	0	0	1	0	0	1
Uttar Pradesh	0	0	1	0	0	4	1	2	8
West Bengal	0	0	0	1	2	1	3	0	7
Andaman & Nicobar	0	0	0	0	0	0	0	0	0
Chandigarh	0	0	0	0	0	0	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0	0	0	0	0
Delhi	0	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0	0
Lakshadweep	0	0	0	0	0	0	0	0	0
Pondicherry	0	0	0	0	0	0	1	0	1
India	0	0	3	9	46	85	45	27	215

Note : Excluding Assam

Source : Census of India, 1981

ANNEXURE 7 OF SECTION II

India : Statewise Distribution of Districts by Their Urban Growth Pattern, 1971-81.

State/U. T's.	Number of Districts by urban growth patterns, 1971-81							Total. Districts
	All Slow	All fast	All moderate	Fast+ slow	Fast+ moderate	Slow+ moderate	Fast+ slow+ moderate	
1	2	3	4	5	6	7	8	9
All India	6	36	47	6	113	48	122	378
Andhra Pradesh	0	1	1	0	6	1	14	23
Arunachal Pradesh	0	3	1	0	0	0	0	4
Bihar	0	3	3	1	17	1	6	31
Gujarat	0	1	0	0	1	5	11	18
Goa	0	0	0	0	0	0	1	1
Haryana	0	1	1	0	4	2	4	12
Himachal Pradesh	1	1	1	0	0	3	4	10
Jammu & Kashmir	1	2	3	1	1	2	3	13
Karnataka	0	0	0	0	5	4	10	19
Kerala	1	1	0	1	3	1	4	11
Madhya Pradesh	0	3	10	0	20	3	9	45
Maharashtra	0	0	1	0	4	9	12	26
Manipur	0	2	0	0	0	0	0	2
Meghalaya	0	1	2	0	0	0	0	3
Mizoram	0	2	0	0	0	0	0	2
Nagaland	1	1	0	0	0	0	0	2
Orissa	0	0	0	0	8	0	5	13
Panjab	0	0	1	0	2	1	8	12
Rajasthan	0	1	3	0	15	0	7	26
Sikkim	0	2	0	0	2	0	0	4
Tamil Nadu	0	0	1	0	0	8	7	16
Tripura	1	0	1	0	0	1	0	3
Uttar Pradesh	0	6	11	2	24	4	9	56
West Bengal	0	0	3	1	1	3	8	16
Andaman & Nicobar	0	1	0	0	0	0	0	1
Chandigarh	0	1	0	0	0	0	0	1
Dadra & Nagar Haveli	0	0	1	0	0	0	0	1
Daman & Diu	0	0	2	0	0	0	0	2
Delhi	0	1	0	0	0	0	0	1
Lakshadweep	0	0	0	0	0	0	0	0
Pondicherry	1	2	1	0	0	0	0	4

ANNEXURE 8 OF SECTION II

India : Statewise Distribution of Fast and Slow Growing Towns having Consistent and Irregular Growth Rates during 1961-71 and 1971-81

State /U. Ts.	Fast Growing Towns				Slow Growing Towns			
	Consis- tently fast grow- ing	1961-71 below the national Av. 71-81	Did not exist in 1961	Total	Consis- tently slow growing	Decline in their G. R.	Did not exist in 1961	Total
1	2	3	4	5	6	7	8	9
Andhra Pradesh	40	27	10	77	13	8	7	28
Arunachal Pradesh	0	0	3	3	0	0	0	0
Bihar	13	37	11	61	4	4	5	13
Goa	2	0	0	2	0	1	0	1
Gujarat	10	7	3	20	23	21	12	56
Haryana	9	5	1	15	9	3	0	12
Himachal Pradesh	1	1	3	5	10	3	3	16
Jammu & Kashmir	4	3	1	8	1	8	1	10
Karnataka	18	17	6	41	17	19	2	38
Kerala	3	4	6	13	13	8	0	21
Madhya Pradesh	36	16	9	61	6	12	3	21
Maharashtra	25	3	7	35	33	39	1	73
Manipur	1	0	5	6	0	0	0	0
Meghalaya	1	0	0	1	0	0	0	0
Mizoram	1	0	1	2	0	0	0	0
Nagaland	2	0	0	2	0	1	0	1
Orissa	12	6	7	25	2	3	2	7
Punjab	4	19	1	24	17	5	1	23
Rajasthan	20	19	3	42	4	4	1	9
Sikkim	1	0	5	6	0	0	0	0
Tamil Nadu	7	5	0	12	46	61	7	114
Tripura	0	0	0	0	1	2	0	3
Uttar Pradesh	16	41	15	72	8	7	5	20
West Bengal	10	15	5	30	7	12	1	20
Andaman & Nicobar	1	0	0	1	0	0	0	0
Chandigarh	1	0	0	1	0	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0
Delhi	1	0	0	1	0	0	0	0
Lakshadweep	0	0	0	0	0	0	0	0
Pondicherry	1	1	0	2	1	0	0	1
All India	240	226	102	568	51	215	221	487

ANNEXURE 9 OF SECTION II

India : Statewise Distribution of Fast and Slow Growing Towns by Level of Urbanisation of Their Location, 1981

State/U. Ts.	Fast Growing Towns			Slow Growing Towns		
	Above the national average	Below the national average	Total	Above the national average	Below the national average	Total
	(Above 23.70%)	(Below 23.70%)		(23.70%)	(Below 23.70%)	
1	2	3	4	5	6	7
Andhra Pradesh	13	64	77	6	22	28
Arunachal Pradesh	0	3	3	0	0	0
Bihar	9	52	61	4	9	13
Gujarat	12	8	20	31	25	56
Goa	2	0	2	1	0	1
Haryana	2	13	15	4	8	12
Himachal Pradesh	0	5	5	0	16	16
Jammu & Kashmir	1	7	8	0	10	10
Karnataka	14	27	41	15	23	38
Kerala	4	9	13	7	14	21
Madhya Pradesh	14	47	61	3	18	21
Maharashtra	12	23	35	42	31	73
Manipur	5	1	6	9	0	0
Maghalaya	0	1	1	0	0	0
Mizoram	1	1	2	0	0	0
Nagaland	2	0	2	0	1	1
Orissa	1	24	25	1	6	7
Punjab	12	12	24	9	14	23
Rajasthan	11	31	42	4	5	9
Sikkim	2	4	6	0	0	0
Tamil Nadu	9	3	12	71	43	11
Tripura	0	0	0	0	3	3
Uttar Pradesh	28	44	72	6	14	20
West Bengal	14	16	30	7	13	20
Andaman & Nicobar	1	0	1	0	0	0
Chandigarh	1	0	1	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0
Delhi	1	0	1	0	0	0
Lakshadweep	0	0	0	0	0	0
Pondicherry	2	0	2	1	0	1
INDIA	173	395	568	212	275	487

Note: Excluding Assam.

ANNEXURE 10 OF SECTION II

India : Statewise Distribution of Fast and Slow Growing Towns by Urban Growths Rate of the District of Their Location, 1971-81

State/U. Ts	Number of fast growing towns by % decadal growth rate of district, 71-81				Number of slow growing towns by % decadal growth rate of district, 71-81			
	Lower Below 20.0%	Moderate 20.0%— 46.24%	Higher Above 46.24%	Total	Lower below 20.0%	Moderate 20.0%— 46.24%	Higher Above 46.24%	Total
1	2	3	4	5	6	7	8	9
Andhra Pradesh	0	15	62	77	0	16	12	28
Arunachal Pradesh	0	0	3	3	0	0	0	0
Bihar	0	25	36	61	0	8	5	13
Gujarat	0	15	5	20	0	46	10	56
Goa	0	0	2	2	0	0	1	1
Haryana	0	3	12	15	0	7	5	12
Himachal Pradesh	0	4	1	5	6	9	1	16
Jammu & Kashmir	0	2	6	8	1	3	6	10
Karnataka	0	18	23	41	0	28	10	38
Kerala	4	1	8	13	14	0	7	21
Madhya Pradesh	0	15	46	61	0	11	10	21
Maharashtra	0	17	18	35	13	51	9	73
Manipur	0	0	6	6	0	0	0	0
Meghalaya	0	0	1	1	0	0	0	0
Mizoram	0	0	2	2	0	0	0	0
Nagaland	0	0	2	2	1	0	0	1
Orissa	0	1	24	25	0	0	7	7
Punjab	0	11	13	24	0	17	6	23
Rajasthan	0	7	35	42	0	5	4	9
Sikkim	0	0	6	6	0	0	0	0
Tamil Nadu	0	9	3	12	0	108	6	114
Tripura	0	0	0	0	0	2	1	3
Uttar Pradesh	0	16	56	72	0	7	13	20
West Bengal	0	12	18	30	2	13	5	20
Andaman & Nicobar	0	0	1	1	0	0	0	0
Chandigarh	0	0	1	1	0	0	0	0
Dadra & Nagar Haveli	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0
Delhi	0	0	1	1	0	0	0	0
Lakshadweep	0	0	0	0	0	0	0	0
Pondicherry	0	0	2	2	1	0	0	1
ALL INDIA	4	171	393	568	38	331	118	48

Characteristics of the Fast and Slow Growing Towns : Results of a Field Survey

1. Scope of the Field Survey

Why certain towns achieve high population growth rates, and why the growth rates remain sluggish in the case of others? Are the characteristics of the fast growing different from those of the slow growing towns? Is the growth or decline of towns an isolated phenomenon or associated with other economic, administrative, and social and physical changes?

The National Institute of Urban Affairs undertook a field survey of 70 towns, 35 fast growing and an equal number of slow growing, to investigate into these

questions, with a view of gain further understanding of the dynamics of the urban growth processes. The main purpose of the survey was to identify and isolate the factors which cause a higher growth in some towns and lower in others, so that these could help in determining the courses of actions, needed to be taken once the "towns for development" had been identified.

The towns selected for field surveys possess varying growth characteristics and profiles. Their basic data are shown in Tables 13 and 14. As would be noted from the tables, the sampled towns are of

TABLE—13

Population and Growth Rate of the Sampled Fast Growing Towns

Name of the Town	Population 1981	Percentage Decadal Growth Rate	
		1961—71	1971—81
Durgapur	311798	395.58	50.89
Bhubaneswar	219211	176.07	107.80
Bellary	201579	46.12	61.03
Modinagar	87665	76.46	101.63
Dewas	83465	50.00	60.92
Morena	69848	58.46	55.56
Giridih	65444	9.29	62.36
Brājrajnagar	54033	96.45	69.82
Tanuku	53618	38.69	56.79
Balaghat	53183	75.60	59.49
Yemmiganur	50701	43.77	67.52
Udgir	50564	62.89	64.99
Bellampalli	44721	4.09	47.64
Makrana	40663	34.59	74.95
Rayachoti	35257	43.85	46.58
Ararca	33363	61.05	48.78
Sangareddy	31360	76.47	82.04
Balatra	28070	45.29	59.53
Chitrakutdham	27464	17.00	54.34
Hosan	27119	42.01	63.45
Kathuaparamba	24690	0.00	139.59
Bharthana	24428	23.00	78.72
Sultanganj	25578	24.03	54.07
Rehli	16343	47.61	71.87
Pokhrayan	16000	91.24	60.00
Nalhati	15073	10.00	58.16
Talaja	14739	41.86	47.02
Mukhed	14006	40.05	51.30
Barughutu	12289	0.00	61.80
Keshoraiptan	11448	55.98	57.12
Bhavanigarh	9817	15.14	56.82
Kalanwali	9643	60.11	47.65
Banavar	6599	22.68	49.67
Adityapatnam	3044	0.00	93.02
Lakhenpur	1162	40.32	88.64

Source : Census of India, 1981
State Level General Population Tables.

different population sizes, with five in the population range of 100,000; 28 with populations varying between 20-50,000, and the balance with populations of less than 20,000. The tables also show that 23 of the 35 fast growing towns have consistently grown at rates higher than the national averages for 1961-71 and

1971-81. Similarly, the growth rates of 13 slow growing towns, out of a sample of 35, were consistently lower than the national aggregate of 20 per cent. The growth rates of many towns are noted to be irregular if these are examined in a longer time frame (Chart 8).

TABLE-14
POPULATION AND GROWTH RATE OF THE SAMPLES SLOW GROWING TOWNS

Name of the Town	Population 1981	Percentage Decadal Growth Rate	
		1961-71	1971-81
Bardhaman	167364	32.43	16.72
Rajapalayam	101640	22.12	16.89
Mayuram	67673	17.13	12.43
Attingal	29645	22.68	9.59
Coondapoor	28315	35.88	18.82
Irinjalakuda	26096	13.75	2.72
Wai	24661	18.03	17.21
Badnagar	23925	16.77	19.29
Karkal	20713	19.68	11.40
Talode	20055	16.29	17.79
Shalinghur	17396	28.04	18.35
Bhanvad	15451	14.30	14.38
Dharampur	14116	22.27	18.05
Khapa	12722	26.68	5.31
Kamuthi	12614	15.38	9.14
Virajpet	11676	20.20	19.36
Madhapar	11244	0.00	12.46
Deoli	11159	133.20	-9.27
Satararoad	10867	32.51	5.17
Rajam	10768	26.82	9.86
Aduthurai	10561	14.09	7.80
Sikka	9650	50.83	-27.11
Betul Bazar	8914	21.21	9.17
Talbehat	7681	0.00	2.17
Puvalur	7355	13.89	5.27
Kanapaka	6406	0.00	0.08
Vembadithalam	5667	0.00	14.90
Dhalavaipuram	5246	0.00	12.02
Malkapur	4845	14.15	6.8
Jakhalmandi	4609	24.86	17.61
Garhdiwala	4459	19.03	18.8
Kasauli	3872	8.41	3.06
Sangat	2859	22.86	-19.03
Chajtudih	2077	73.44	19.37
Chenani	1301	0.00	3.13

Source : Census of India, 1981

State Level General Population Tables.

The NIUA's field surveys were designed in such a way that they would shed light on at least the following aspects of the economy of the sampled towns :

- (i) Population growth and components of growth.
- (ii) Administrative status.
- (iii) Location and centrality.
- (iv) Functional base and the nature of functions.

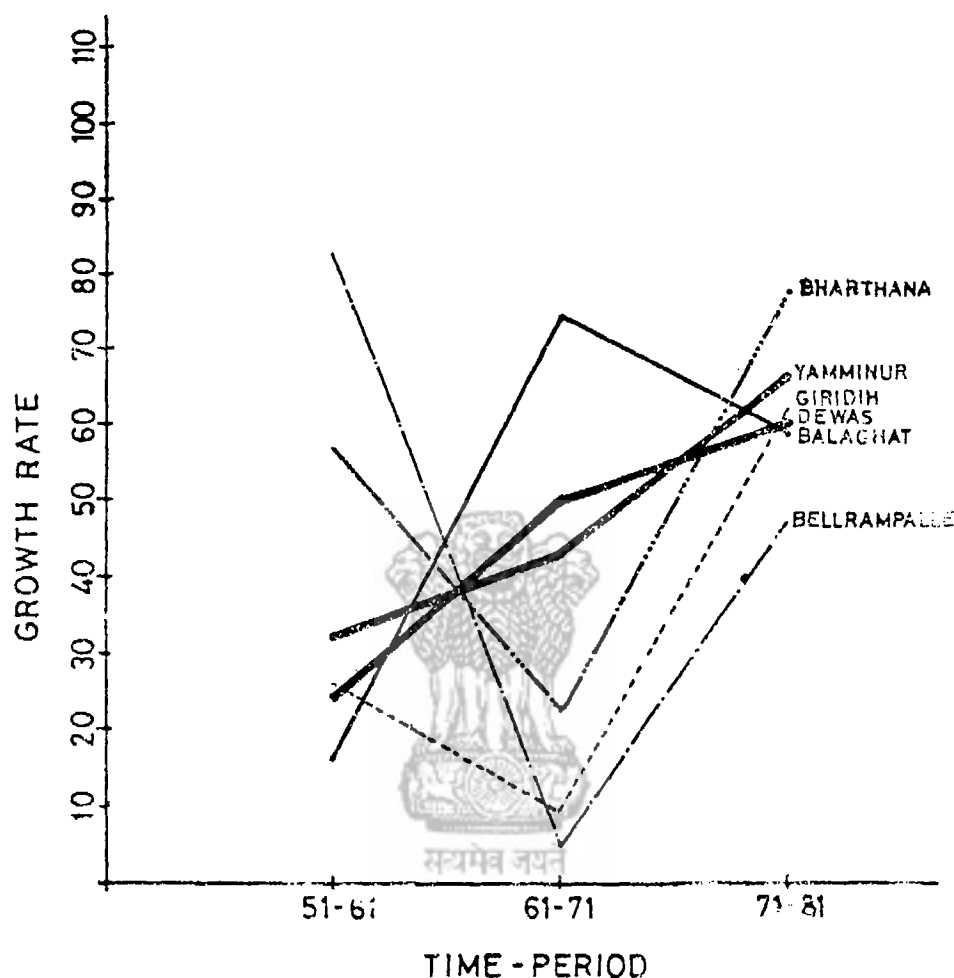
- (v) The degree and nature of linkages between the towns and the regions of their location.

It was assumed that information on the above aspects would directly help in the understanding of the growth characteristics of the sampled towns, and address key questions such as— was the population growth (or the lack of it) due to changes in the jurisdictions?; did the towns that enjoyed or acquired higher administrative or municipal status expand faster in terms of population?; to what extent was the

location of towns on national and state highways, and trunk railways an important factor of growth; did the proximity to metropolitan and large urban centres or on the periphery of irrigation projects influence in

any way the growth rates?; did the fast growing towns have a larger manufacturing component?; and were the fast and slow growing towns characterised by high and low degree of spatial linkages?

CHART 8
IRREGULARITY IN THE URBAN POPULATION GROWTH RATE



It may be mentioned in the passing that a survey of the past research work showed virtually no unanimity on the characteristics of the growing or stagnating centres. Nor was there in literature any consensus on what criteria should be used to identify them. Fox, for instance, in his widely-quoted study had pointed out that a growing centre was one which was "an urban place of less than 250,000 population", and which acted "as the vital heart of the development district". According to him, strong linkages with the national economy, the centre of a labour market, a major retail trade area, high level tertiary functions and good communications were important for purposes of identifying the growth centres. Allen and Hermansen considered it as "a main centre at the regional level which in addition to its function as a regional service centre also provided a prosperous and

reasonably diversified industrial structure". The centre, according to them, "should either be growing or show potential for growth of economic activity, employment and income. Such a centre will *ceteris paribus* need to be above a certain level".

The NIUA has taken note of the past literature in determining the indicators for this study, and presented data on those indicators in this section of the report. The results are not conclusive but adequate to provide a broad understanding of the main characteristics of the fast and slow growing towns.

2. Results of the Field Survey

(a) Change in area and jurisdiction

During the period 1971-81, 27 of the total number of sampled towns registered changes in their jurisdictions. Area increased in the case of 15 towns; the

balance experienced a decrease in area, as may be seen from the following table :

TABLE—15

Distribution of the Sampled Towns by Changes in Area

Change in area	Number of		
	Fast growing towns	Slow growing towns	Total
Increase in area	9	6	15
Decrease in area	3	9	12
Total	12	15	27

It is to be noted from the table that 9 out of the 15 towns that registered an increase in area were "fast growing". At the same, the effect of these jurisdictional changes on the population levels is not significant; only in two towns, changes in the area contributed significantly to the fast population growth. Similarly, 9 of the 12 towns whose area decreased during 1971-81 were "slow growing". The effect of this decrease on the population base was again minimal, pointing to the overall conclusion that jurisdictional changes are not an important factor in either the fast growth or slow growth of towns.

(b) *Administrative and Municipal Status*

Administrative status of a town, that is, its being the headquarters of a district or sub-district, is an important factor in the urban growth process. Of the 35 fast growing towns, 22 either enjoyed the status of the headquarters of their respective districts or acquired it between 1971-81. Only 13 towns did not have any administrative status. As against this, 24 slow growing towns had no administrative status of any kind. Out of the sampled fast growing towns, 26 enjoyed the status of a municipality—a symbol of the towns' increasing economic and social importance. Nine acquired the status between 1971-81. In comparison, 18 slow growing towns had no municipal status, and only one acquired it during 1971-81. Tables 16 and 17 may be seen for data on the administrative and municipal status.

TABLE—16

Distribution of Sampled Towns by Administrative Status

Administrative Status	Number of		
	Fast growing towns	Slow growing towns	Total
Headquarters (1971)			
— District	5	—	5
— Sub-district	15	11	26
Acquired the headquarters status during 1971-81	2	—	2
No headquarters status	13	24	37
Lost the headquarters status during 1971-81	Nil	Nil	—
Total	35	35	70

TABLE—17

Distribution of Sampled Towns by Municipal Status

Municipal Status	Number of towns		
	Fast growing	Slow growing	Total
Municipal status 1971	17	16	33
Acquired Municipal status during 1971-81	8	1	9
Acquired municipal status during 1981-87	1	—	1
No municipality	9	18	27
Lost the municipal status during 1971-81	Nil	Nil	—
Total	35	35	70

The tables show that a higher urban status—be it a headquarter of an administrative unit or a municipal one in the overall hierarchy is enjoyed in greater number by the fast growing towns. The slow growing towns have lower urban status, in comparative terms.

(c) *Location and centrality*

The location and centrality of a town is perhaps the most important facilitating factor of growth. It has often been identified as one of the preconditions of growth and development. In practice too, there are few examples of towns and other centres which have registered appreciable growth rates without being on the main transport and communication routes. The transport cost, i.e. the cost of exchanging goods and services and various types of inputs and outputs, determines the economic role of towns, as well as the extent to which they can compete in the regional and national markets.

The NIUA's field survey shows virtually no differences between the fast and slow growing towns as far as the accessibility is concerned. Highway links are available to most of the surveyed towns, as would be noted from the following table. The slow growing towns however, are poorly endowed with rail links as compared to the fast growing towns. 20 of them had no rail links at the time of the survey.

TABLE—18
Distribution of the Sampled Towns with Road and Rail Links

Transport links	Number of towns		
	Fast growing	Slow growing	Total
Road :			
1. National Highways	2	6	8
2. State Highway	12	14	26
3. National Highway and State Highway	11	8	19
4. No National and State Highway	10	7	17
Total	35	35	70
Rail :			
1. Trunk Railway	6	6	12
2. Other railway lines	10	4	14
3. Trunk and other railway lines	9	5	14
4. No railway	10	20	30
Total	35	35	70

(d) Functional base and the nature of functions

The 1981 census data on the occupational and functional characteristics of urban centres are not available in any useable form. Nor would these be available at any future date, making it impossible to analyse the changes in the functional and occupational base of the fast and slow growing towns. The NIUA's field survey, however, included data on indicators such as the levels of employment in manufacturing, and in trade and commerce. It also included data on whether the sampled towns had industrial estates, wholesale mandies etc. The underlying notion here was that the existence of industrial and trading infrastructure indicated the presence in the town of entrepreneurs, skills, labour supply, and a market, or if it did not exist, there was a potential of the same. Absence of these types of infrastructures indicated lack of potentials.

Table 19 gives the data on the industrial and trading infrastructure.

TABLE—19
Distribution of the Sampled Towns with Industrial Estates and Wholesale Mandies

Indicators	Number of towns	
	Fast growing	Slow growing
Industrial Estate, 1987	13	4
Industrial Estates Established in 1971-81	13	1
Wholesale Mandies 1987	26	17
Wholesale Mandies Established in 1971-81	12	4

The table shows that 13 of the fast growing towns had industrial estates, and 26 of them had wholesale mandies. What is interesting is that all industrial estates were set up during the 1971-81 period. Comparatively, the industrial infrastructure in the sampled slow growing towns was poor, with only four of them reported having industrial estates. Also, less than 50 per cent of them were reported to be performing mandi functions.

(e) The degree and nature of linkages

Earlier in the report a question was raised whether the population growth and stagnation of such a large number of towns was an isolation phenomenon, or the result of the growth processes in the districts or regions of their location. The basic postulate here was that growth or stagnation of a town independent of the district/region could be taken as no more than a transitory phase; growth of this nature would be at most an "oasis in the desert", and was not sustainable.

This study has looked at two sets of questions—whether the sampled towns are located in the fast growing or slow growing districts, and whether there is any relationship between the fast and slow growth of towns with agricultural productivity. Data are shown in Table 20 and 21.

TABLE—20
Distribution of Sample Towns by Districts having Higher/Lower than the National Average Growth Rate (46.24%)

Growth rate	Number of towns		
	Fast growing	Slow growing	Total
Districts having higher than the national urban average (46.24%)	22	9	31
Districts having lower than the national urban average (46.24%)	13	26	39
Total	35	35	70

TABLE—21
Distribution of Sampled Urban Centres by Agricultural Productivity of Districts of their Location (measure by per hectare value of output of major crops 1979-80)

Productivity level	Number of towns		
	Fast growing	Slow growing*	Total
Above the national average Rs. 1468/-	15	14	29
Below the national average Rs. 1468/-	20	15	35
Total	35	29	64

*Information not available for 6 towns.

The table shows that 22 of the fast growing towns are located in districts which registered a growth rate of over 46.24 per cent during 1971-81 decade. On the other hand, 26 of the slow growing towns were located in districts whose population growth rate was less than the urban average for the decade. There is thus a fairly noticeable degree of interdependence between the growth rates of towns and of districts of their location. Table 21 is equally significant as it reveals no relationship between the growth rates of towns and agricultural productivity of districts of their location. Of the 35 fast growing towns, 15 are located in those districts in which the agricultural productivity was assessed to be above the national average. The remaining were located in districts having productivity levels of below the national average. The locations of the slow growing towns follow the same pattern, confirming the widely-held notions that urban population growth (or the lack of it) is the result of both high agricultural productivity and agricultural stagnation.

In addition of gathering data on selected indicators, we also obtained during the course of the field surveys the views of selected officials (districts collectors and the chief executives of the municipal bodies) on how they perceived the growth (or the lack of it) of they were concerned with. Their perceptions and responses are contained in Table 22.

It is significant that a majority of the respondents attribute the fast growth of the sampled towns to their location, centrality, and existence of agricultural and industrial infrastructure. Twentyeight respondents considered the "strategic location" of towns as the most important factor of growth, followed by factors such as rail links, mandies and industrial infrastructures and similar facilities. To at least 11 of the respondents, proximity to large cities was an important factor. The slow growth of towns was attributed by respondents to the absence of any worthwhile development works in the sampled slow growing towns. Equally, shortage of water, poor industrial infrastructure, and undeveloped communications were cited for stagnancy in their growth rates.

TABLE—22
Factors for Fast Growth/Decline of Sampled Towns—
Perceptions

Fast Growing Towns (35)		Slow Growing Towns	
1. Strategic Location	28	1. Lack of any worth development	23
2. Rail Linkages	25	2. Poor Industrial infrastructure	21
3. Wholesale Mandies (Saving Trade and Commerce centre for hinterland)	23	3. Shortage of water	17
4. Availability of Industrial Infrastructure and facility	13	4. Poor Communication Net work	13
5. Change in Municipal Area	13	5. Lack of Higher Education/Health Facilities	11/6
6. Proximity of Large City	11	6. Poor Trade and Commercial Activities	11
7. Higher Education/Health Facilities	10/7	7. Decrease in Area	9

Even though the results of the field survey are not conclusive, the fact that the fast growing towns in comparison with the slow growing display a somewhat different set of characteristics can not be overlooked. It was evident, for instance, that a majority of the fast growing towns were centrally located, were more easily accessible, and that their infrastructural base was stronger. A larger number of those which registered slower growth rates during 1971-81 were poorly endowed in terms of transport and industrial infrastructure. A majority of them were located in low growth districts. Some of the data, for instance, the absence of any relationship of population growth rates of towns with the levels of agricultural productivity, are confounding.

The fields surveys have resulted in a better appreciation of what these towns in effect are, and what characteristics distinguish one set of towns from the other.

ANNEX 1 OF SECTION 3

Urban Growth Rate and level of Urbanisation of Sampled Fast Growing Urban Centres and Districts.

Sl. No.	Name of the State/Urban Centres	Name of the Districts	Growth Rate of the Urban Centres 71-81	Urban Growth Rate of the Districts 1971-81	Level of Urbanisation of the Districts 1981
2		3	4	5	6
ANDHRA PRADESH					
1.	Bellampalli	Adilabad	47.64	54.56	19.34
2.	Rayachoti	Cuddapah	46.58	67.46	19.37
3.	Sangareddy	Medak	82.04	73.14	11.97
4.	Tanuku	West Godavari	56.79	41.98	20.77
5.	Yemmiganur	Kurnool	67.52	46.50	24.49
BIHAR					
6.	Araria	Purnea	48.78	68.77	7.98
7.	Barughutu	Hazaribagh	61.80	59.60	15.11
8.	Giridih	Giridih	62.36	36.66	14.26
9.	Sultanganj	Bhagalpur	54.07	38.47	11.72
GUJARAT					
10.	Talaja	Bhavnagar	47.02	39.14	33.29
HARYANA					
11.	Kalanwali	Sirsa	47.65	89.48	20.44
JAMMU & KASHMIR					
12.	Lakhenpur	Khatua	88.64	67.39	11.38
KARNATAKA					
13.	Aditya Patnam	Tumkur	93.02	42.85	13.77
14.	Banavár	Hasan	49.67	32.84	14.63
15.	Bellary	Bellary	61.03	61.48	33.05
KERALA					
16.	Kuthuparamba	Cannanore	139.59	101.84	23.39
MADHYA PRADESH					
17.	Balaghat	Balaghat	59.49	46.87	8.69
18.	Dewas	Dewas	60.92	56.80	18.71
19.	Morena	Morena	55.56	73.06	13.68
20.	Rehli	Sagar	71.87	41.63	27.86
MAHARASHTRA					
21.	Mukhed	Babded	51.30	43.68	18.74
22.	Udgir	Latur	64.99	44.83	15.39
ORISSA					
23.	Bhubaneswar	Puri	107.80	88.56	14.79
24.	Brajrajnagar	Sambalpur	69.82	59.36	15.49
PUNJAB					
25.	Bhavanigarh	Sangrur	56.82	38.10	22.81
RAJASTHAN					
26.	Balotwa	Barmer	59.53	74.71	8.78
27.	Keshoraipatan	Bundi	57.12	52.30	17.01
28.	Makrand	Nagaur	74.95	53.00	14.56
TAMIL NADU					
29.	Hosur	Dharmapuri	63.45	30.04	9.37
UTTAR PRADESH					
30.	Bharthana	Etawah	78.72	81.84	14.79
31.	Chitrakootdam	Banda	54.34	84.86	11.80
32.	Modinagar	Ghaziyabad	101.63	90.48	34.13
33.	Pukrayan	Kanur	60.80	35.18	46.32
WEST BENGAL					
34.	Durgapur	Burdwan	50.89	59.33	29.3
35.	Nelhatrì	Birbhum	58.16	39.08	8.28

ANNEX 2 OF SECTION 3

Urban Growth Rate and Level of Urbanisation of Sampled Slow Growing Urban Centres

Sl. No.	Name of the State/Urban Centres	Name of the Districts	Growth Rate of the Urban Centres 71-81	Urban Growth Rate of the Districts 1971-81	Level of Urbanisation of the Districts 1981
1	2	3	4	5	6
ANDHRA PRADESH					
1.	Kanapaka	Vizianagaram	0.08	30.59	15.94
2.	Rajam	Srikakulam	9.86	30.43	10.89
BIHAR					
3.	Chaitudih	Dhanbad	19.37	67.81	50.62
GUJARAT					
4.	Sikka	Jamnagar	-27.11	32.92	37.44
5.	Bharvad	Jamnagar	14.38	33.92	37.44
6.	Dharampur	Valsad	18.05	51.65	21.92
7.	Madhapar	Kuchch	12.46	27.94	26.13
HARYANA					
8.	Jakhmandi	Hissar	17.61	60.48	19.29
HIMACHAL PRADESH					
9.	Kasauli	Solan	30.6	36.24	10.76
JAMMU & KASHMIR					
10.	Chenani	Udhampur	3.13	32.37	9.53
KARNATAKA					
11.	Coondapur	Dakshinkannad	18.82	47.93	24.47
12.	Karkal	Dakshinkannad	11.40	47.93	24.47
13.	Virapet	Kodagu	19.36	22.10	15.52
KERALA					
14.	Attingal	Trivendram	9.59	14.73	25.26
15.	Irinjalakuda	Trichur	2.72	106.04	21.10
MADHYA PRADESH					
16.	Badnagar	Ujjain	19.29	36.55	37.48
17.	Betul Bazar	Betul	9.17	109.45	15.32
MAHARASHTRA					
18.	Khapa	Nagpur	5.31	39.22	56.75
19.	Malkapur	Kolhapur	6.88	41.29	24.82
20.	Satara Road	Satara	5.17	16.96	13.04
21.	Talode	Dhule	17.79	39.08	19.52
22.	Waj	Satara	17.21	16.96	13.04
PUNJAB					
23.	Garhdiwala	Hoshiarpur	18.81	41.19	14.44
24.	Sangat	Bhatinda	-19.03	62.33	22.68
RAJASTHAN					
25.	Deoli	Tonk	-9.27	31.73	18.36
TAMIL NADU					
26.	Aduthurai	Thanjavur	7.80	21.42	23.06
27.	Dhalavaiapuram	Ramanathapuram	12.02	26.02	28.21
28.	Kamuthi	Ramanathapuram	9.14	26.02	28.21
29.	Mayuram	Thanjavur	12.43	21.42	23.06
30.	Puvalur	Tiruchirapalli	5.27	24.44	26.13
31.	Rajapalayam	Ramanathapuram	16.89	26.02	28.21
32.	Shalinghur	North Arcot	18.35	29.68	23.01
33.	Vemboditalam	Salem	14.90	25.18	28.93
UTTAR PRADESH					
34.	Talbehat	Lalitpur	2.17	83.43	13.33
WEST BENGAL					
35.	Burdhaman	Burdhaman	16.72	59.33	29.3

ANNEX 3 OF SECTION 3

THE EFFECT OF JURISDICTIONAL CHANGE ON POPULATION GROWTH

Name of the TOWN	Net Population Change 1971-81	Net Area Change 1971-81 (Sq. Kms.)	Estimated Population Growth Due to Jurisdictional Change	
			Number	% of Net Population Increase
1	2	3	4	5
FAST GROWING				
Rayachoti	11204	-12.02	—	—
Sangareddy	14133	3.11	578	4.09
Tanuku	19421	-3.16	—	—
Giridih	25136	1.99	499	1.98
Banavar	2190	4.15	826	37.72
Bellary	79396	38.19	5767	7.55
Kathuparamba	14385	10.88	6147	42.73
Baleghat	19387	11.02	1366	6.89
Dewas	31599	2.68	303	0.96
Bhubaneswar	113720	27.88	8002	7.04
Makrana	17420	-24.41	—	—
Bharthana	10760	4.91	1979	18.39
SLOW GROWING				
Rajam	966	-4.50	—	—
Sikka	-3590	-1.23	—	—
Jakhalmendi	690	0.54	—	—
Coondapoor	4484	0.02	—	—
Karkal	2120	0.27	—	—
Virajpet	1894	-2.35	—	—
Badnagar	3868	-0.05	—	—
Betul Bazar	749	-0.10	—	—
Talode	3029	-20.00	—	—
Sangat	-672	-2.64	—	—
Aduthurai	764	-0.01	—	—
Dhalavaipuram	563	5.00	—	—
Rajapalayam	14688	1.61	—	—
Talbehat	163	-0.03	—	—
Burdhman	24046	0.02	—	—

ANNEX 4 OF SECTION 3
Sampled Fast Growing Towns
Physical, Economic and Social Factors, 1986

Name of the Town	Physical			Economic					Social					Others	
	Increase in area	Nearest large city (<100 Kms.)	Irrigation project 71-81	Wholesale mandies		Transport Link			Univ/ P. G. coll.	Med. coll.	Tech. coll.	Gen. hosp.	Spe. hosp.	Admn. status	Mnc. status
				Rail	N. H.	7	8	S. H.							
1	2	3	4	5	6	7	8		9	10	11	12	13	14	15
Durgapur .	.	.	*	*	*	*	*	*	.	.	.	.	.	.	.
Hubaneswar .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bellary .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Modinagar .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dewas .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Morena .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Girdih .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Brajrajnagar .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Tanuku .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Balaghat .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Yemmiganur .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Udgir .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bellampalli .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Makrana .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rayachoti .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Arara .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sangareddy .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Balotra .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Chitrakutdham .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hosan .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Thuaparamba .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bharthana .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sultanganj .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rehli .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pokhrayan .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Nalhati .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Talaja .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mukhed .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Barughutu .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Keshoraipatan .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bhavanigarh .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Kalanwali .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Banavar .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Adityapatnam .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lakhenpur .	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

ANNEX 5 OF SECTION 3

Sampled Slow Growing Towns

Physical, Economic and Social Factors in 1986

Name of the Town	Physical			Economic					Social					Others	
	Increase in area	Nearest large city (<100 Kms.)	Irrigation project 71-81	Wholesale mandies	Transport link			Univ. P. G. coll.	Med. coll.	Tech. coll.	Gen. hosp.	Spec. hosp.	Admn. status	Mnc. status	
					Rail	N. H.	S. H.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Bardhaman .			*	*	*	*	*				*	*	*	*	
Rajapalayam .			*	*	*		*				*	*	*	*	
Mayuram .			*	*	*		*				*	*	*	*	
Attungal .			*	*	*		*				*	*	*	*	
Coondapoor .			*	*	*		*				*	*	*	*	
Irinjalakuda .			*	*	*		*				*	*	*	*	
Wai .			*	*	*		*				*	*	*	*	
Badnagar .				*	*		*				*	*	*	*	
Karkal .				*	*		*				*	*	*	*	
Talode .					*		*				*	*	*	*	
Shalinghur .			*		*		*				*	*	*	*	
Bhanvad .			*		*		*				*	*	*	*	
Dharampur .			*	*	*		*				*	*	*	*	
Khapa .			*		*		*				*	*	*	*	
Kamuthi .			*		*		*				*	*	*	*	
Virajpet .					*		*				*	*	*	*	
Madhapur .					*		*				*	*	*	*	
Deoli .				*	*		*				*	*	*	*	
Satararoad .			*		*		*				*	*	*	*	
Rajam .			*	*	*		*				*	*	*	*	
Aduthurai .			*	*	*		*				*	*	*	*	
Sikka .				*	*		*				*	*	*	*	
Betul Bazar .			*	*	*		*				*	*	*	*	
Talbehat .			*		*		*				*	*	*	*	
Puvalur .			*	*	*		*				*	*	*	*	
Kanapaka .			*	*	*		*				*	*	*	*	
Vembadithalam .			*	*	*		*				*	*	*	*	
Dhalavaipuram .			*	*	*		*				*	*	*	*	
Malapur .			*	*	*		*				*	*	*	*	
Jakhalmandi .			*	*	*		*				*	*	*	*	
Garhdiwala .			*	*	*		*				*	*	*	*	
Kasauli .			*	*	*		*				*	*	*	*	
Sangat .			*	*	*		*				*	*	*	*	
Chaitudih .			*	*	*		*				*	*	*	*	
Cherani .			*	*	*		*				*	*	*	*	

Reshaping Future Urban Growth Patterns : Some Options

That there is need in India to reshape the future urban growth patterns is amply clear from the analysis contained in section 2 of this report. The entire pattern of urban population growth and distribution is marked with imbalances, and for reasons that are evident enough, the pattern seems to be perpetuating itself almost in a linear fashion. No discontinuity of any appreciable scale has been noticed in the pattern of population distribution, and it is in this light that the issue of reshaping the future growth has been analysed in this report.

It needs to be stated at the outset that the issue of reshaping or guiding the future urban population growth is linked with several normative considerations of primary importance. For instance : should the future urban policy contribute to the efficiency objectives of development, or be guided by equity considerations, lies at the centre of the issue. Under one set of objectives, towns, cities and areas of "high promise" have to be identified for priority and preferential treatment. In the latter case, priority has to be assigned to the lagging and stagnating towns and areas.

The issue is also linked with the goals of urban policy, that is, whether the goals are purely spatial and meant to correct the imbalances in the regional and size class distribution of urban population, or meant to serve the larger socio-economic goals and objectives.²³ Before, however, we present the options under the two sets of normative conditions, we analyse below though briefly, the future prospects of urbanisation, and how the same has been perceived by different experts and task forces.

1. Prospects of Urbanisation

Studies on the future prospects of urbanisation in India are few in number.²⁴ Furthermore, the studies that are available do not shed much light on the likely effects of the alternative development scenarios on the growth of urban population. All of them, however, suggest with no trace of any ambiguity, that India's urban population will more than double itself in the 1981-2001 period. The Office of the Registrar General, for instance, has estimated India's urban population to reach 230 million in 1991, and 326 million in the year 2001 AD. The Task Forces on Housing and Urban Development have placed the number between 234-236 million for 1991, and between 315-320 million for 2001 AD. According to the United Nations, India's urban population will touch a high of 330 million in the first year of the twentyfirst century, which incidentally will be the largest for any country in the world. It will be in excess of even China's total urban population, which is estimated at 314.16 million in that year.²⁵

These figures indicate that anywhere between 156-172 million persons will be added to the country's urban population base in a span of twenty years—a massive increase by any reckoning. What is more, there appears to be an inevitability about this growth, with about 40-41 per cent of it expected to be contributed by "natural increase", and another 18-20 per cent by "reclassification" of the existing rural settlements into urban.

Apart from these gross numbers, estimates have been made by the Task Forces of the likely distribution of urban population by size classes of urban

23. The key goals of efficiency, equity and higher levels of living (among others) dominate spatial objectives so that the latter are subgoals, at best. Harry Richardson, "Defining Urban Population Distribution Goals in Development Planning," in United Nations, *Population Distribution Policies in Development Planning*, New York, 1981.

24. The Office of the Registrar General, Report of the Expert Committee on Population Projections, New Delhi (1971); Jaipal P. Ambannavar, *Population: Second India Series* (1975); Planning Commission, Reports of the Task Forces on Housing and Urban Development, New Delhi (1983).

25. See, United Nations, *The Prospects of World Urbanisation*, Revised as of 1984, New York, 1987.

centres as well as by regiene (states), and it is useful to refer to and analyse them in the context of this

study. Table 24 gives the estimates of future urban population by size classes.

TABLE—24

Estimates of Future Urban Population by Size class (1991 and 2001 AD)

Size class	1991		2001	
	Total	Percent	Total	Percent
More than 1 million	66·5	28·2	97·2	29·2
100,000—1 million	85·7	36·4	133·5	40·0
More than 100 000 (Large cities)	(152·2)	(64·6)	(230·7)	(69·2)
20—100,000 (Medium sized towns)	56·7	24·1	72·6	21·8
Less than 20,000 (Small towns)	26·7	11·3	30·1	9·0
Total	235·6	100·0	333·4	100·0
Annual average growth rate (%)	4·10 (1981-91)	3·81 (1981-2001)	3·53 (1991-2001)	

This table is significant on atleast two counts. Firstly, it shows that the growth rate of urban population will not only be maintained in the coming decade; it is, in fact, expected to accelerate in the 1981-91 period. The estimates place the rate at 4.1 per cent per annum compound. If this estimate fructifies, then it will set a new record of urban population growth in the country. Even the following decade will witness only a marginal slowing down of the growth rate.

A second feature of this table is that the position of large cities (+100,000 population size class) as a single size class is expected to further consolidate in the coming decades. In the year 2001 AD, this size class will account for 69.2 per cent of the country's

projected urban population; in 1981, it was placed at 60.46 per cent. Evidently, this consolidation will take place at the cost of the small towns size class, whose share will drop down to a bare 9 per cent.

The National Institute of Urban Affairs have made tentative estimates on the expected number of settlements in different size classes, in the year 2001 AD. According to these estimates, India will have at the turn of the century, atleast three megalopolises (Calcutta, 16.53 million; Bombay, 16.0 million; and Deihi, 13.52 million), 46 one-million cities (list annexed with this chapter), and over 453 cities in the population size class range of 100,000 and 1 million. Table 25 gives the distribution.

TABLE—25

Projected Number of Urban Settlements by Size Classes, 2001 AD

Size class	Population size classes					
	More than 10 million	1 to 10 million	100,000 to 1 million	50,000 to 100,000	20,000 to 50,000	Less than 20,000*
Number of Urban settlements	3	46	453	431	855	—

*This table does not take in to account the number of new settlements likely to be come urban during 1981-2001 through a process of reclassification. This, however, does not affect the number of settlements in the higher size classes, particularly in + 100,000 size class.

The attached map shows the likely distribution of these cities.

The Office of the Registrar General as made separate estimates of the future urban population at the level of states These are shown in Table 26.

TABLE—26

Estimates of Future Urban Population by Regions, 1991 and 2001 AD

States	Estimated urban population million		Expected urbanisation level 2001	Expected Net Addition 1981-2001 AD	
	1991	2001		Total million	Percent change
Andhra Pradesh	17.90	24.21	32.93	11.73	93.94
Assam	2.96	4.07	13.34	2.03	99.51
Bihar	13.53	21.04	19.87	12.33	141.56
Gujarat	14.11	17.80	38.25	7.20	67.92
Haryana	4.57	7.06	37.33	4.25	150.35
Himachal Pradesh	0.42	0.51	8.78	0.19	59.38
Jammu & Kashmir	1.77	2.39	26.98	1.13	89.68
Karnataka	15.68	22.00	42.27	11.27	105.03
Kerala	6.58	8.96	26.21	4.19	87.84
Madhya Pradesh	16.34	24.51	32.64	13.93	131.66
Maharashtra	29.56	38.32	43.12	16.33	74.26
Manipur	0.54	0.73	34.10	0.36	97.30
Meghalaya	0.40	0.70	32.97	0.46	191.67
Nagaland	0.25	0.46	29.28	0.34	283.33
Orissa	5.19	8.43	23.22	5.32	171.06
Punjab	6.50	8.92	40.47	4.28	92.24
Rajasthan	11.34	17.75	31.71	10.55	146.53
Sikkim	0.10	0.18	30.41	0.13	260.00
Tamil Nadu	20.17	24.38	38.66	8.43	52.85
Tripura	0.29	0.37	12.08	0.15	68.18
Uttar Pradesh	32.01	53.16	32.10	33.28	167.40
West Bengal	18.85	23.99	31.63	9.58	66.48
Total	230.15	326.04	33.06	166.32	104.13

According to this table the six most-urbanised states (as assessed in 1981) will have in 2001 AD approximately 41 per cent of the country's total urban population as against about 50 per cent in 1981. Their positions are expected to undergo minor shifts with Haryana replacing West Bengal in the list of the six most-urbanised states. The two states expected to improve their position in the overall urban hierarchy are Karnataka and Punjab. Bihar and Orissa will continue to be among the least urbanised states.

The prospects of urbanisation thus indicate continuation of the existing patterns rather than signalling any noticeable departures from them. These also suggest that the existing imbalances in the urban population growth and distribution will persist in the coming years, unless major changes and interventions are designed to narrow them down.

2. Reshaping Urban Growth Patterns: Some Options

The case for reshaping the future urban growth patterns stems essentially from two sources. The

first one which has been stressed repeatedly in the earlier part of this study is the high degree of unevenness in the existing distribution of urban population in the country. Ample evidence has been presented to show that urban population is unevenly distributed in almost every conceivable fashion. For instance, the large cities as a single size group has strengthened its position at the cost of the other size class urban centres at an extraordinarily fast pace. From a stage when it had just about 26 per cent of the total urban population (1901), it now accounts for over 60 per cent of the same (1981). The population base of the small towns has shrunk most dramatically during this period.

Regionally too there are serious inequalities. Some parts of the country are more urbanised and urbanising faster. The process and rate of urbanisation in others is sluggish and even though the 1971--81 witnessed an acceleration in the urban population growth rate of those parts, these are unlikely to change the overall distribution pattern.²⁶ Evidence was presented to show that over

26. It is interesting to note that a significant proportion of growth that occurred in the otherwise sluggish states of Uttar Pradesh, Orissa, Bihar and Madhya Pradesh during 1971-81 was due to the emergence of "new towns", by a process of "notification".

55 per cent of the total number of districts had not been able to attain by 1981, even the 1951 level of urbanisation. Arranged in a descending order by the level of urbanisation, the first 100 or 25 per cent of the districts account for over 67 per cent of the country's total urban population, and the last 102 districts contain a mere 2.14 per cent of the same.²⁷

Even when one analyses the distribution pattern of the fast growing and slow growing towns, one is struck by the fact that the consistently fast growing towns have remained a characteristic feature of the more urbanised and better-off states. The only redeeming feature is that the pattern of distribution of the slow growing towns is less than clear.

A second reason for reshaping the future urban growth emanates from the need to provide a more direct link and interface between the urban growth processes and economic development than has been the case so far. The past patterns have been a consequence of, and dependent on the economic development processes, and interactions between them have, at best, been marginal. This itself provides an adequate justification for reshaping urban growth patterns. It is in the light of these two reasons that certain options to reshape and guide future urban growth have been presented in this report.

The options are many. The first and foremost is aimed at reduction of spatial imbalances by acceleration of the development process of the small and medium towns and slowing down the growth of large cities. This option has been the mainstay of urban policies in most developing countries, and continues to enjoy the ideological appeal that it contains. For instance, the United Nations which undertakes biannual survey of the governmental policies on population distribution notes that :²⁸

- (i) a substantial number of less developed countries find the spatial distribution of population "unacceptable";
- (ii) concentration of population in a few metropolitan centres is the principal cause for "unacceptability";
- (iii) the countries where the problems of population distribution are more severe, have adopted policies of deceleration to a greater degree; and

- (iv) the LDC's consider deceleration of migration towards large urban centres as a possible solution to the problems of unsatisfactory spatial distribution of population.

The basic assumption under this option is that population distribution can be influenced by an appropriate mix of incentives and disincentives measures to achieve better spatial balance. Experiences, however, show that such options and policies have turned out to be short-sighted and difficult of accomplishment, and the underlying assumptions "mistaken, misleading and at least debateable." The evidence from countries such as Indonesia, Thailand and others indicates that redistribution of population is a long drawn out process and requires massive investments. Similarly, regional distributions of populations remain stable over long periods and are not prone to easy changes. At subregional levels to, urban hierarchies do not undergo rapid changes.

A second option is to identify consistently fast growing and fast urbanising towns and areas for priority attention. This option underscores the need to most efficiently utilise the scarce resources by putting them in towns and areas that will yield the highest dividends.

Criteria such as the following can be utilised to draw up the list of towns for priority development.

- (i) towns which have shown moderate-to-high population growth rates consistently for 1961-71 and 1971-81 decades;
- (ii) towns which are located in high population growth rate districts or which have attained higher than national average growth rates; and
- (iii) which have rail/highway links.

An alternative to this which would fulfil the equity objectives would be to place priority on those towns which have experienced low population growth rate, and which are not responding to the general development stimuli. Those towns are also identifiable on the basis of criteria such as—

- (i) the population growth rates being lower than natural growth rates;
- (ii) the growth rates of districts of their location also being moderate to low.

27. Arranged in a descending order the population composition at district levels works out as under: *First* 100 districts contain 67.78 per cent of the country's total urban population; *second* 100 districts have 20.01 per cent; *Third* 100 districts have 10.04 per cent; and the *last* 102 districts have 2.14 per cent.

28. See, United Nations, *World Population Trends and Policies*, New York, 1977 and 1979; and Om Prakash Mathur, *Small Cities and National Development*, United Nations Centre for Regional Development, Nagoya, 1982.

Indicative lists of such towns are annexed with this section of the report. Both these options are, however, questionable on grounds that (i) they are too simplistic for a country that have diverse patterns of urbanisation and a complex set of economic and social development objectives, and (ii) they either allow the market forces to overtake other considerations, or prevent the market forces to operate.

A fourth option which we have elaborated in this report and which we consider relevant in India's context aims at establishing a more direct link and interface between the future urban growth patterns and newly emerging socio-economic needs and objectives. The main justification for this option springs from the fact that the process of urbanisation is vitally linked with the country's economic and social parameters, and consequently, the two should be looked at together rather than in isolation of each other.

The proposed option has five interconnected features.

1. *Development of High Productivity Urban Corridors*

The rationale of, and justification for, this component is based on the fact that there are several areas in the country that have attained over these years economies of scale, and of agglomeration and specialisation. These are centres of high technology research and development. Much of the country's GNP emanates from such centres. They have begun to form clusters but do not yet enjoy the interindustry and spatial linkages. One of the proposed responses is to identify such corridors and develop them so that they can further maximise the scale and specialisation economies.

A number of such corridors have already emerged on the country's space. They are distinguished by, as may be seen from the list,²⁹ by their centrality, proximity to metropolitan and large cities, a higher proportion of working force in manufacturing existence of an infrastructural base, and above all, a constellation of urban centres of varying sizes and growth rates. The list includes (i) Thane—Bombay Pune; (ii) Valsad-Surat-Bharuch; (iii) Ahmedabad-Vadodra-Surat; (iv) Bangalore-Hosur-Salem-Trichirapalli; (v) Delhi-Ghaziabad-Meerut; (vi) Delhi-Faridabad-Ballabhgarh; (vii) Indore-Dewas etc.

2. *Development of a Network of Towns to Strengthen and Promote the Rural Economy*

The primary focus of this component is on the identification and development of a large number of networks of small and medium-sized towns which

would establish and foster better and sustainable rural urban relationships. Experiences have shown the vital interdependence of the rural and urban areas, and the fragility of one in the absence of the other. The development of networks will enable the rural areas to take full advantage of the urban infrastructure and services, and the urban areas of the vast production capacities and potentials of rural areas. The emphasis here is not on the size or scale of urban centres but on their numbers (which have to be large), and distance between them (which has to be short).

There are several examples of such networks particularly in the agriculturally prosperous areas of Punjab, Haryana, Western parts of Uttar Pradesh, Western Rajasthan, coastal areas of Andhra Pradesh, and parts of Maharashtra, Madhya Pradesh, Karnataka and Tamil Nadu. These comprise of (i) Ludhiana-Khanna-Jullandhar; (ii) Rohtak-Panipat; (iii) Meerut-Muzzafarnagar; (iv) Mandaya-Mysore; (v) Sholapur-Sangli-Kolhapur; (vi) Guntur-Krishna-West Godawari; (vii) Thanjavur-Ramanathapuram etc., among others.

3. *Development of An Interlinked Hierarchy of Urban Settlements*

Such a strategy is necessary for regions where the size of urban settlements and consequently the levels of demand for services and infrastructures are small, and where because of the scale limitations, investments in infrastructure can neither be justified nor sustained. An interlinked hierarchy of settlements which can mutually support and reinforce each other is inevitable for such regions.

The region for which we recommend such a strategy is the Northeastern Region (Assam, Meghalaya, Tripura, Mizoram, Manipur, Nagaland and Arunachal Pradesh) where the number of towns is small and far between. The constituent units of this region have extremely diverse patterns of urbanisation (see a sample of maps) and are characterised by different problems, compulsions and perspectives.³⁰ We propose that this region be dealt with on a separate footing and be provided with stimulus and proper direction in order to promote economic growth, enhance the availability of urban services to the surrounding areas, and, above all, to strengthen the federating role of the towns of the region. We further propose that the urbanisation perspective of the region be tackled with at three spatial levels—

- (i) the regional level, in respect of the higher order services which would require partnership between the various constituent states

29. The list are indicative and not comprehensive.

30. See for details, National Institute of Urban Affairs.

(e.g., Guwahati, Tezpur, Tinsukhia, Dibrugarh, Silchir, Jorhat, Dimapur, Shillong, Imphal, and Agartala.

- (ii) the state levels for schemes aimed at the development of selected growth centres and new growth centres in unserved area e.g., Pasighat, Sibsagar, Jowai, Chura-chandpur, North Lakhimpur, Karimganj, Bongaigaon etc.
- (iii) the level of individual towns for town-specific problems of water supply, sanitation, housing and transport.

4. An Urban Revitalisation Strategy for Stagnating Towns and Areas

The basic objective underlying this component is to intervene in those regions which have a disproportionately high concentration of the slow growing and stagnating towns. The analysis of the demographic data has already indicated the surfacing of such centres, often in clusters, in several parts of the country in particular Tamil Nadu, the west coast belt, and several other states. These are indicated in the maps. Initially, the reasons of stagnation have to be identified and then special policies to revitalise the economy of these areas have to be formulated.

The areas needing priority attention are initiated in the map showing the consistently slow growing towns.

5. Prevent Spurious Urban Growth

A detailed study of the components of urban population growth suggests that in states like Uttar Pradesh and Bihar, a significant proportion of the urban population increase during 1971-81 occurred as a result of the notification of the erstwhile rural settlements as municipal bodies, without any regard to the criteria used by census for classifying settlements as "urban". This can be seen from Table 27 below.

It is evident that this is, at best, an administrative decision to classify an area as urban. Such areas have virtually no urban character. Indeed, if such practices are continued in the future, the danger is that India's urban population may show at a much faster increase than envisioned at present. For instance, the 1981 census reported 9,036 rural settlements with populations exceeding 5,000. Their combined population was estimated at 78.3 million (see Annex 2). Any step to classify them as urban without the fulfilment of the criteria laid down by the census (density of 400 persons per sq. kms., and 75 per cent of male working force in non-agricultural occupations) can result in an extraordinarily large increase in urban population.

TABLE 27
Distribution of New Towns According to the Reasons for Inclusion

State	New towns added because of			Total
	Notification	Acquisition of demographic characteristics	Others	
Andhra Pradesh	—	32	—	32
Bihar	20	14	—	34
Gujarat	11	37	—	48
Haryana	14	4	1	19
Himachal Pradesh	11	—	—	11
Jammu & Kashmir	13	1	—	14
Karnataka	25	15	7	47
Kerala	2	48	—	50
Madhya Pradesh	65	16	—	81
Maharashtra	2	30	1	33
Manipur	23	—	1	24
Meghalaya	—	6	—	6
Nagaland	—	4	—	4
Orissa	17	7	4	28
Punjab	28	1	—	29
Rajasthan	38	6	—	44
Sikkim	—	—	1	1
Tamil Nadu	—	31	—	31
Tripura	4	—	—	4
Uttar Pradesh	373	10	—	383
West Bengal	1	72	1	80
All UTs	1	42	1	44
Total	648	376	23	1047*

*This number treats units with in urban agglomeration as separate units, and that is why, it differs from the number given earlier in the report.

The basic proposal here is to make the procedures for classifying settlements as urban "stricter", and prevent what one might call spurious urban growth.

The National Institute of Urban Affairs believes that a strategy that aims at the simultaneous development of high productivity urban corridors, a network of centres to link urban and rural economies, revitalisation of stagnating towns, and prevention of spurious

growth can reshape the future urban growth patterns in a way that it can meet the emerging needs of this nation. Any strategy that continues to look at urbanisation patterns in terms of size or spatial distribution is much too simple for a country which has diverse patterns, where problems and perspectives vary and which is on the anvil of a new economic order that favours high productivity and faster and balanced economic growth.



ANNEXURE 1 OF SECTION IV
One-Million cities of 2001 AD

Cities	Population		
	1971	1981	2001
Hyderabad U.A.	1796339	2545836	5113457
Vijayawada U.A.	344607	543008	1348250
Vishakhapatnam U.A.	363467	603630	1664878
Bokaro Stl City U.A.	107159	264480	1611095
Dhanbad U.A.	458625	678069	1482197
Jamshedpur U.A.	456146	669580	1442778
Patna U.A.	551210	918903	2553729
Ranchi U.A.	266545	502771	1788832
Ahmedabad U.A.	1752414	2548057	5387086
Surat U.A.	493001	913806	3139542
Vadodara U.A.	467487	744881	1891130
Faridabad Comp. Admn.	122817	330864	2401217
Srinagar U.A.	423253	606002	1242287
Bangalore U.A.	1664208	2921751	9005636
Hubli Dharwad	379166	527108	1018685
Cochin U.A.	505838	685836	1260775
Bhopal	384859	671018	2039854
Durg-Bhilainagar U.A.	245124	490214	1960584
Gwalior U.A.	406140	555862	1041236
Indore	560936	829327	1812803
Jabalpur U.A.	534845	757303	1518284
Aurangabad U.A.	165253	316421	1160104
Greater Bombay City	5970575	8243405	15714030
Nagpur U.A.	930459	1302066	2549790
Nasik U.A.	271681	429034	1069933
Pune U.A.	1135034	1686109	3720824
Thane U.A.	207352	389801	1377565
Ulhasnagar U.A.	396384	648671	1737165
Rourkela U.A.	172502	322610	1128353
Amritsar	458029	594844	1003282
Ludhiana	401176	607052	1389977
Jaipur U.A.	636768	1015160	2580126
Jodhpur U.A.	317612	506345	1286902
Kota	212991	358241	1013452
Coimbatore U.A.	736203	920355	1438371
Madras U.A.	3169930	4289347	7853698
Madurai U.A.	711501	907732	1477481
Tiruchirapalli U.A.	464624	609548	1049108
Agra U.A.	634622	747318	1036301
Allahabad U.A.	513036	650070	1043721
Ghaziabad U.A.	137033	287170	1261150
Kanpur U.A.	1275242	1639064	2707712
Lucknow U.A.	813982	1007604	1543974
Meerut U.A.	383106	536615	1052811
Varanasi U.A.	635175	797162	1255604
Calcutta U.A.	7420300	9194018	14114747
Ondal U.A.	32469	109209	1235484
Chandigarh U.A.	232940	422841	1393295
Delhi U.A.	3647023	5729283	14139166

ANNEXURE 2 OF SECTION IV

Number and Population of Villages above 5,000 pop, 1981

State/Uts/India	5,000—9,999		10,000 and above	
	Number	Population	Number	Population
Andhra Pradesh	1,058	6,929,323	163	2,141,496
Arunachal Pradesh	2	11,251	—	—
Bihar	1,054	6,922,509	192	2,565,593
Gujarat	418	2,700,933	49	607,061
Goa	31	195,638	1	11,663
Haryana	221	1,436,842	20	239,138
Himachal Pradesh	3	18,723	—	—
Jammu & Kashmir	20	114,136	1	11,780
Karnataka	401	2,640,776	35	409,634
Kerala	222	1,703,596	905	18,678,858
Madhya Pradesh	155	986,176	4	48,428
Maharashtra	579	3,837,056	116	1,505,789
Manipur	12	73,499	1	10,533
Meghalaya	—	—	—	—
Mizoram	—	—	—	—
Nagaland	1	6,355	—	—
Orissa	47	283,284	1	10,289
Punjab	120	768,014	1	12,256
Rajasthan	321	2,056,066	21	239,252
Sikkim	—	—	—	—
Tamil Nadu	1,000	6,624,271	182	2,771,095
Tripura	56	354,054	8	114,083
Uttar Pradesh	751	4,764,167	52	625,946
West Bengal	702	4,528,053	82	1,163,349
Andaman & Nicobar	—	—	—	—
Chandigarh	—	—	—	—
Dadra & Nagar Haveli	3	19,962	—	—
Delhi	15	93,608	—	—
Daman & Diu	3	19,962	—	—
Lakshadweep	1	6,812	—	—
Pondicherry	6	43,547	—	—
India	7,202	47,140,246	1,834	31,166,643

ANNEXURE 3 OF SECTION IV

List of Towns for Priority Development under Efficiency Criterion

Towns	Population 1981	G.R. 71-81	Towns	Population 1981	G.R. 71-81
1	2	3	1	2	3
Adilabad	53482	76.11	Faridabad Comp. Admn.	330864	169.40
Mancheriyal	32478	63.96	Gurgaon U.A.	100877	76.51
Pajmaner	24038	76.08	Hisar U.A.	137369	53.59
Tirupati	115292	75.10	Jind	56748	48.71
Madanapalle	54938	50.69	Gohana	26188	56.31
Tirumalai	20988	62.96	Paonta Sahib	5800	57.10
Rayachoti	35257	46.58	Bandipore	14218	129.29
Proddatur	107010	51.18	Lakhenpur	1162	88.64
Narasaraopet	67032	54.21	Leh	8718	57.96
Vinukonda	24238	49.07	Rajauri	8690	46.32
Chilakaluripet	61645	48.39	Vijayapura	17212	49.02
Jagtial	53213	72.21	Kanakapura	30161	48.60
Sirsilla	34134	47.55	Bellary	201579	61.03
Karimnagar	86125	76.06	Bidar	78856	55.63
Koratla	30196	70.59	Davangere	196621	62.35
Bhadrachalam	21354	99.38	Harihar	52334	54.43
Yellandu	27292	62.77	Challakere	25043	48.07
Khammam	98757	73.50	Chitradurga	74580	48.41
Nandigama	23214	50.53	Gulbarga	221325	52.02
Vijayawada U.A.	543008	57.57	Sindhur	25875	80.73
Yammiganur	50701	67.52	Gangawati	58735	69.52
Mahbubnagar	87503	69.07	Manvi	21345	53.46
Badapalle	18624	54.70	Shimoga	151783	47.78
Siddipet	42755	62.59	Dandeli	47625	87.32
Sangareddy	31360	82.04	Trichur U.A.	170122	66.46
Zahirabad	28956	57.16	Varkala	34009	67.00
Miryalguda	44129	129.09	Balaghat U.A.	53183	59.49
Kavali	48119	62.48	Jagdalpur U.A.	63632	72.30
Nizamabad	183061	58.30	Betul	46293	50.00
Kamareddy	33048	85.30	Bhind	74515	62.72
Ongole	85302	59.95	Bhopal	671018	74.35
Vicarabad	20737	58.18	Korba	83387	155.37
Vishakhapatnam U.A.	603630	66.08	Chhatarpur	51959	61.01
Bheemunipatnam	34619	142.24	Chikhali Kln. Prsia	83213	49.24
Jangaon	25112	48.89	Dewas	83465	60.92
Dhanbad U.A.	678069	47.85	Durg-Bhilainagar UA*	490214	99.99
Ramgarh U.A.	65268	72.11	Dabra	33421	55.95
Araria	33363	48.78	Hoshangabad U.A.	46300	57.30
Khejari	13269	63.73	Itarsi Bhilakhedi UA	69619	48.55
Khunti	18787	59.98	Indore	829327	47.85
Ranchi U.A.	502771	88.63	Sabalgarh UA.	17188	57.47
Saharsa	57580	148.01	Ambah	17381	63.17
Musabani	29413	48.47	Morena	69864	55.60
Jamshedpur U.A.	669580	46.79	Joura U.A.	15740	52.61
Talaja	14739	47.02	Mahashmund	27122	54.81
Tajala	10967	62.67	Tilda Newara	15089	49.78
Keshod	32036	63.34	Raipur	338245	64.21
Gandhidham U.A.	61489	38.04	Barailly	13013	57.49
Rajkot	445076	48.56	Raisen	15914	74.15
Surat U.A.	913806	85.36	Rehli	16343	71.87
Thangadh	18586	53.67	Satna U.A.	96667	55.51
Vadodra U.A.	744881	59.34	Burhar Dhanpuri U.A	52318	113.66
Mormugao	69684	58.14	Shivpuri	75738	48.92
Ponda	15330	100.18	Sidhi	19654	109.89
			Ambikapur U.A.	38291	61.29

1	2	3
Kurasia U.A.	53915	76.10
Nag a	56602	73.79
Kannad	16391	57.64
Aurangabad U.A.	316429	91.48
Parli	48946	57.49
Georai	15495	47.01
Manjlegaon	22555	65.86
Ambejogai	42362	52.84
Bid	80287	60.69
Balharbour	61398	79.17
Rajura	10569	48.40
Chandrapur City	115777	54.09
Ichalkaranji City	133751	52.46
Pun : U.A.	1686109	48.55
Alan li	7523	57.12
Thane U.A.	389801	87.99
Ulhasnagar U.A.	648671	63.65
Bhayandar	25646	141.99
Impal	156622	55.05
Tura	35257	127.63
Aizawl	74493	134.70
Dima pur	32878	164.59
Balangir	54943	53.70
Bhadrak	60500	49.68
Jajapur Road U.A.	20935	51.20
Dhenkanal	35653	81.76
Koraput	31665	47.24
Baripada U.A.	52989	84.47
Bhubaneswar	219211	107.80
Brajrajnagar	54033	69.82
Sambalpur U.A.	162214	54.36
Bargarh	35400	54.82
Rourkela U.A.	322610	87.02
Khanna	53761	54.40
Ludhiana	607052	51.32
Sirhind	30380	68.52
Kishangarh	62032	65.84
Vijaynagar	15191	78.68
Kherli	8046	67.69
Banswara U.A.	48070	75.68
Balotra	28070	59.53
Bharatpur	105274	50.60
Bhilwara	122625	49.26
Nokha	24119	114.93
Keshoraipatan	11448	57.12

1	2	3
Nimbahera	27763	67.83
Chittaurgarh U.A.	44990	73.59
Suratgarh	29815	67.10
Anupgarh	12997	184.34
Hanumangarh	60071	84.65
Bhadra	22568	60.28
Jaipur U.A.	1015160	59.42
Bhawani Mandi	16928	53.39
Jodhpur U.A.	506345	59.42
Kota	358241	68.20
Pali	91568	83.75
Gangtok	36747	176.13
Tiruttani	24496	49.72
Ponneri	16021	48.38
Teni Allinagaram	53018	52.11
Rameswaram	27928	66.68
Rishikesh	29145	65.16
Chhibramau	23263	47.93
Fatehpur	84831	55.18
Srinagar	9171	64.77
Kotdwara	17048	48.80
Dadri	19723	51.01
Modinagar U.A.	87665	101.67
Ghaziabad U.A.	287170	109.56
Muradnagar	26047	86.25
Pilkhua	37884	58.24
Orai	66397	56.18
Baghat	17157	47.07
Bhowali	3212	46.47
Hardwar U.A.	145946	59.73
Narendranagar	3596	50.46
Uttarkashi	10043	66.83
Rajpur U.A.	60734	76.59
Birlapur U.A.	50831	216.78
Raniganj U.A.	119101	155.93
Katwa U.A.	44430	54.10
Durgapur	311798	50.89
Siliguri	154378	58.36
Bagula	11739	72.66
Gangarampur	22767	53.74
Islampur	26353	67.69
Balurghat U.A.	112621	67.87
Port Blair	49634	89.31
Chandigarh U.A.	422841	81.52
Delhi U.A.	5729283	57.09
Pondicherry U.A.	251420	62.26

ANNEXURE 4 OF SECTION IV

List of Towns for Priority Development under Equity Criterion

Cities	Population 1981	G.R. 71-81	Cities	Population 1981	G.R. 71-81
1	2	3	1	2	3
Urayakonda	21754	10.12	Kottayam	64431	7.90
Machavaram	13662	16.13	Changanacherry	51955	7.02
Pithapuram	36607	16.62	Vaikom	21097	5.41
Samalkot	41264	19.24	Chithurthamangalam	30407	6.65
Sompeta	12792	9.92	Neyyattinkera	27993	16.72
Mandasa	7307	10.24	Rampura	14313	12.83
Salur	36006	16.42	Sitama	9920	17.26
Bobbili	36239	18.24	Tummar	34840	17.22
Sojitra	15229	18.01	Talode	20055	17.79
Petlad	47020	18.93	Kundalwadi	11617	11.83
Kapadvanj	35178	14.41	Murud	11235	0.22
Umreth	28299	16.82	Matheran	3920	15.40
Vaso	11774	10.93	Shrivardhan	13740	11.33
Vadnagar	22079	14.23	Revdanda	7246	7.46
Chanasma	16053	11.49	Rajapur	8884	—1.47
Shivajipur	4872	2.27	Malwan	17328	—1.43
Rewari	51562	17.49	Pophali	4817	—24.43
Bawal	7760	18.85	Harnai	4703	—36.67
Beri	13490	9.35	Sawantwadi	18671	10.66
Maham	11722	11.20	Vengurla	12339	4.52
Bilaspur	8063	14.58	Dabhol	6363	17.79
Dalhousie U.A.	4189	—18.23	Rahimatpur	11666	12.91
Bakloh	1664	—12.74	Wai	24661	17.21
Palampur	2834	11.62	Firozpur Cantt U.A.	44678	7.47
Kangra	7093	18.24	Firozpur	61162	8.95
Yol	9214	15.29	Dera Baba Nanak	6212	16.37
Jutogh	1396	8.13	Garhdiwala	4459	18.81
Theog	1528	15.06	Haryana	5633	12.61
Kasauli	3872	3.06	Dhanaula	13885	16.91
Dagshai	1769	—18.14	Unara	7198	19.43
Punch	14171	18.28	Kuzhittura	18427	13.76
Sadalgi	13911	11.22	Padmanabhapuram	18246	8.03
Nipani	41783	18.99	Bhavani Sagar	3650	13.32
Narasimharajapura	6102	3.23	Alagapuri	3055	—6.89
Sringeri	4272	14.26	Kadiapatti	4028	—5.22
Ajjampur	7693	14.55	Ponnamaravati	11467	6.53
Gurmatkal	11616	10.65	Portonovo	20100	15.44
Alur	4177	12.28	Khawai	10722	14.82
Belakavadi	6396	15.51	Pateasaer	8033	15.12
Melukote	2958	8.35	Jalpaiguri	61743	11.94
Alleppey	169940	6.10	Balichak	8663	17.45
Tiruvalla	29225	9.53	Maho	9588	6.87
Shertallai	40492	10.18			

APPENDIX

Districtwise distribution of Fast, Moderately, Slow Growing and New Towns 1971—81

India/State/Union Territories/Districts	Number of Towns				
	Total 1981	Fast growing 1971-81 (>46.24%)	Moderately growing 1971-81 (20%—46.24%)	Slow growing 1971-81 (<20%)	New towns 1981
			36- 4)		
1	2	3	4	5	6
INDIA	3301	568	1365	487	881
Andhra Pradesh					
Adilabad	12	6	3	2	1
Aanantapur	11	4	6	1	0
Chittoor	13	6	7	0	0
Cuddapah	13	5	2	1	5
East Godavari	16	0	8	4	4
Guntur	15	4	8	3	0
Hyderabad	2	0	1	0	1
Karimnagar	12	5	5	1	1
Khammam	7	4	2	0	1
Krishna	15	2	12	0	1
Kurnool	11	2	7	1	1
Mahbubnagar	11	7	3	1	0
Medak	10	5	2	1	2
Nalgonda	10	4	2	0	4
Nellore	8	4	3	0	1
Nizamabad	7	2	3	1	1
Prakasam	11	5	3	1	2
Rangareddi	5	3	0	0	2
Srikakulam	11	1	6	4	0
Vishakhapatnam	9	2	5	2	0
Vizianagaram	10	2	3	4	1
Warangal	4	2	2	0	0
West Godavari	11	2	7	1	1
TOTAL	234	77	100	28	29
Arunachal Pradesh					
Dibang Valley	0	0	0	0	0
East Kameng	0	0	0	0	0
East Siang	1	1	0	0	0
Lohit	1	1	0	0	0
Lower Subansiri	2	0	0	0	2
Trip	0	0	0	0	0
Upper Sunbansiri	0	0	0	0	0
West Kameng	1	0	1	0	0
West Siang	1	1	0	0	0
TOTAL	6	3	1	0	2

	1	2	3	4	5	6
Bihar						
Aurangabad		5	2	2	0	1
Begusarai		3	2	1	0	0
Bhagalpur		5	3	2	0	0
Bhojpur		8	0	4	1	3
Darbhanga		1	0	1	0	0
Dhanbad		11	2	4	1	4
Gaya		5	2	3	0	0
Giridih		6	2	1	2	1
Gopalganj		3	1	1	0	1
Hazaribagh		7	3	3	0	1
Katihar		2	1	0	0	1
Madhubani		3	0	2	0	1
Munger		12	4	5	3	0
Muzaffarpur		1	1	0	0	0
Nalanda		5	2	1	0	2
Nawada		3	1	2	0	0
Palamu		6	1	3	1	1
Pashchim Champ		4	1	3	0	0
Patna		9	3	4	0	2
Purba Champaran		4	4	0	0	0
Purnia		8	4	2	0	2
Ranchi		9	3	5	0	1
Rohtas		6	3	2	1	0
Saharsa		7	1	6	0	0
Samastipur		4	1	2	0	1
Santhal Pargana		11	5	4	0	2
Saran		4	0	2	0	2
Singhbhum		17	4	7	3	3
Sitamarhi		4	2	0	1	1
Siwan		3	2	1	0	0
Vaishali		3	1	2	0	0
TOTAL		179	61	75	13	30
Gujarat						
Ahmedabad		12	0	6	6	0
Amreli		12	1	10	1	0
Banas Kantha		5	2	2	1	0
Bharuch		8	1	2	4	1
Bhavnagar		16	2	12	0	2
Gandhinagar		1	1	0	0	0
Jamnagar		15	0	9	5	1
Junagarh		20	2	14	3	1
Kachchh		10	1	5	4	0
Kheda		18	0	6	10	2
Mahesana		14	0	10	3	1
Panch Mahals		8	0	6	2	0
Rajkot		12	3	5	4	0
Sabar Kantha		8	2	3	1	2
Surat		14	2	5	2	5
Surendranagar		10	1	7	2	0
The Dangs		0	0	0	0	0
Vadodara		18	1	6	5	6
Valsad		19	1	7	3	8
TOTAL		220	20	115	56	29
Goa						
Goa		15	2	8	1	4
TOTAL		15	2	8	1	4

1	2	3	4	5	6
Haryana					
Ambala	11	0	5	3	3
Bhiwani	4	0	3	0	1
Faridabad	5	1	2	0	2
Gurgaon	9	2	3	2	2
Hisar	8	2	2	2	2
Jind	6	1	4	0	1
Karnal	8	1	2	1	4
Kurushetra	7	2	5	0	0
Mahendragarh	6	1	3	2	0
Rohtak	6	0	3	2	1
Sirsa	4	2	1	0	1
Sonepat	3	3	0	0	0
TOTAL	77	15	33	12	17
Himachal Pradesh					
Bilaspur	3	1	1	1	0
Chamba	4	0	0	3	1
Hamirpur	3	1	0	0	2
Kangra	8	0	3	3	2
Kinnaur	0	0	0	0	0
Kullu	3	0	2	0	1
Lahul & Spiti	0	0	0	0	0
Mandi	4	0	1	3	0
Shimla	6	1	2	2	1
Sirmaur	3	1	1	1	0
Solan	7	1	3	2	1
Una	5	0	1	1	3
TOTAL	46	5	14	16	11
Jammu & Kashmir					
Anantnag	8	0	5	1	2
Badgam	1	0	0	0	1
Baramulla	6	2	2	1	1
Doda	6	1	3	2	0
Jammu	8	1	5	0	2
Kargil	1	1	0	0	0
Kathua	6	1	2	1	2
Kupwara	2	0	1	0	1
Leh (Ladakh)	1	1	0	0	0
Pulwama	4	0	3	0	1
Punch	1	0	0	1	0
Rajauri	4	1	0	1	2
Srinagar	2	0	1	0	1
Udhampur	6	0	2	3	1
TOTAL	56	8	24	10	14
Karnataka					
Bangalore	11	5	6	0	0
Belgaum	19	2	11	5	1
Bellary	12	3	5	1	3
Bidar	6	1	4	0	1
Bijapur	19	1	14	2	2
Chikmagalur	10	0	4	5	1
Chitradurga	10	4	4	2	0
Dakshin Kannad	17	0	3	6	8
Dharwad	22	0	17	1	4
Gulbarga	15	3	8	1	3
Hassan	12	3	5	3	1
Kodagu	10	1	5	3	1
Kolar	13	5	8	0	0
Mandya	11	0	8	2	1
Mysore	13	1	12	0	0
Raichur	12	4	5	1	2
Shimoga	13	1	6	5	1
Tumkur	12	4	7	1	0
Uttar Kannad	13	3	5	0	5
TOTAL	250	41	137	38	34

1	2	3	4	5	6
Kerala					
Alleppey	7	1	0	5	1
Cannanore	20	3	3	0	14
Ernakulam	13	2	1	4	6
Idukki	2	1	0	0	1
Kottayam	4	0	0	4	0
Kozhikode	2	0	1	1	0
Malappuram	4	1	3	0	0
Balghat	4	1	1	2	0
Quilon	6	1	1	0	4
Trichur	18	1	1	3	13
Trivandrum	5	2	1	2	0
Wayand					
TOTAL	85	13	12	21	39
Madhya Pradesh					
Balaghat	5	1	1	2	1
Bastar	4	2	1	0	1
Betul	5	1	2	1	1
Bhind	10	1	3	0	6
Bhopal	2	1	1	0	0
Bilaspur	12	1	9	0	2
Chattarpur	10	3	3	1	3
Chhindwara	11	2	3	2	4
Damoh	3	0	3	0	0
Datia	2	0	1	0	1
Dewas	8	2	5	0	1
Dhar	8	1	5	0	2
Durg	6	5	0	0	1
East Nimar	6	0	3	0	3
Guna	6	2	4	0	0
Gwalior	4	1	2	1	0
Hoshangabad	11	2	8	0	1
Indore	5	1	3	1	0
Jabalpur	10	0	7	0	3
Jhabua	6	1	5	0	0
Mandla	4	1	2	0	1
Mandsaur	12	0	8	4	0
Morena	8	4	1	1	2
Narsimhapur	4	0	4	0	0
Panna	2	0	2	0	0
Raigarh	6	0	3	0	2
Raipur	10	4	4	0	2
Raisen	6	2	1	0	3
Rajgarh	8	1	4	0	3
Rajnandgaon	5	2	3	0	0
Ratlam	6	0	5	0	1
Rewa	9	0	1	0	8
Sagar	10	3	5	0	2
Satna	9	1	3	0	5
Sehore	4	0	3	0	1
Seoni	2	0	1	0	1
Shahdol	13	4	4	0	5
Shajapur	9	0	4	2	3
Shivpuri	5	2	2	0	1
Sidhi	1	1	0	0	0
Surguja	7	3	4	0	0
Tikamgarh	6	1	0	0	5
Ujjain	6	1	4	1	0
Vidisha	4	2	2	0	0
West Nimar	13	2	7	4	0
TOTAL	303	61	146	21	75

1	2	3	4	5	6
Maharashtra					
Ahmednagar	7	0	4	1	2
Akola	9	0	7	2	0
Amravati	12	0	8	4	0
Aurangabad	9	2	7	0	0
Bhandara	7	0	2	3	2
Bid	7	5	2	0	0
Buldana	9	1	7	1	0
Chandrapur	8	4	3	0	1
Dhule	7	1	5	1	0
Greater Bombay	1	0	1	0	0
Jalgaon	14	1	10	3	0
Kolhapur	11	1	5	4	
Nagpur	14	1	6	4	3
Nanded	11	4	6	1	0
Nasik	15	2	5	6	2
Osmanabad	13	2	10	1	0
Parbhani	12	1	9	2	0
Pune	17	2	8	3	4
Raigarh	16	2	5	7	2
Ratnagiri	13	0	3	9	1
Sangli	6	0	4	1	1
Satara	10	0	5	4	1
Solapur	10	0	4	6	0
Thane	24	5	1	7	11
Wardha	6	0	3	3	0
Yavatmal	8	1	7	0	0
TOTAL	276	35	137	73	31
Manipur					
Manipur Central	23	5	2	0	16
Manipur East	1	0	0	0	1
Manipur North	3	0	0	0	3
Manipur South	3	1	0	0	2
Manipur West	1	0	0	0	1
Mengnoupal	1	0	0	0	1
TOTAL	32	6	2	0	24
Meghalaya					
East Garo Hills	1	0	0	0	1
East Khasi Hills	2	0	1	0	1
Jaintia Hills	1	0	1	0	0
West Garo Hills	2	1	0	0	1
West Khasi Hills	1	0	0	0	1
TOTAL	7	1	2	0	4
Mizoram					
Aizawl	4	1	0	0	3
Chhimtuipui	1	0	0	0	1
Lunglei	1	1	0	0	0
TOTAL	6	2	0	0	4
Nagaland					
Kohima	2	2	0	0	0
Mokokching	1	0	0	1	0
Mon	1	0	0	0	1
Phek	0	0	0	0	0
Tuensang	1	0	0	0	1
Wokha	1	0	0	0	1
Zunheboto	1	0	0	0	1
TOTAL	7	2	0	1	4

1	2	3	4	5	6
Orissa					
Balangir	7	1	4	1	1
Baleshwar	6	2	1	1	2
Cuttack	8	2	5	0	1
Dhankanal	9	2	2	0	5
Ganjam	20	1	12	2	5
Kalahandi	5	1	4	0	0
Kendujhar	6	2	2	0	2
Koraput	14	3	5	2	4
Mayurbhanj	4	1	1	0	2
Phulakani	3	1	1	0	1
Puri	9	2	3	0	4
Sambalpur	8	6	2	0	0
Sundargarh	4	1	2	1	0
TOTAL	103	25	44	7	27
Punjab					
Amritsar	11	1	1	5	4
Bathinda	12	2	6	3	1
Faridkot	11	2	5	0	4
Firozpur	9	5	2	2	0
Gurdaspur	11	0	8	2	1
Hoshiarpur	10	1	5	3	1
Jalandhar	16	3	6	3	4
Kapurthala	8	0	3	0	5
Ludhiana	10	2	4	0	4
Patiala	13	4	6	1	2
Rupnagar	9	3	2	2	2
Sangrur	14	1	9	2	2
TOTAL	134	24	57	23	30
Rajasthan					
Ajmer	8	2	5	1	0
Alwar	5	2	2	0	1
Banswara	2	1	1	0	0
Barmer	3	1	1	0	1
Bharatpur	12	1	8	0	3
Bilwara	6	1	3	0	2
Bikaner	4	1	3	0	0
Bundi	5	1	3	0	1
Chittaurgarh	8	2	5	0	1
Churu	11	2	7	2	0
Dungarpur	2	0	2	0	0
Ganganagar	16	8	4	0	4
Jaipur	16	2	6	1	7
Jaisalmer	2	0	2	0	0
Jalor	4	2	0	0	2
Jhalawar	6	1	3	1	1
Jhunjhunun	13	2	8	1	2
Jodhpur	4	2	2	0	0
Kota	11	2	4	0	5
Nagaur	10	2	6	0	2
Pali	12	1	4	1	6
Swai Madhopur	6	1	4	0	1
Sikar	9	2	5	0	2
Sirohi	5	0	5	0	0
Tonk	6	1	3	2	0
Udaipur	9	2	4	0	3
TOTAL	195	42	100	9	44

1	2	3	4	5	6
Sikkim					
East	3	2	1	0	0
North	1	1	0	0	0
South	2	2	0	0	0
West	2	1	1	0	0
TOTAL	8	6	2	0	0
Tamil Nadu					
Chengalputtu	15	3	8	3	1
Coimbatore	10	0	8	2	0
Dharmapuri	7	1	4	2	0
Kanniyakumari	5	0	3	5	0
Madras	1	0	1	0	0
Madurai	22	1	9	11	1
Nilgiri	7	2	4	1	0
North Arcot	20	0	12	7	1
Periyar	12	1	2	4	5
Pudukkottai	8	0	4	3	1
Ramanathapuram	30	3	10	12	5
Salem	18	0	7	10	1
South Arcot	14	1	7	5	1
Thanjavur	29	0	8	20	1
Tiruchirapalli	17	0	4	13	0
Tirunelveli	30	0	10	19	1
TOTAL	245	12	101	114	18
Tripura					
North Tripura	3	0	2	0	1
South Tripura	4	0	0	2	2
West Tripura	3	0	1	1	1
TOTAL	10	0	3	3	4
Uttar Pradesh					
Agra	14	3	5	1	5
Aligarh	20	0	6	0	14
Allahabad	16	0	5	0	11
Almora	4	0	1	2	1
Azamgarh	21	1	4	0	16
Bahraich	5	1	2	0	2
Ballia	9	0	3	0	6
Banda	10	4	1	0	5
Bara Banki	12	0	5	0	7
Bareilly	18	1	4	0	13
Basti	10	0	3	0	7
Bijnor	19	1	10	0	8
Badaun	22	0	6	0	16
Bulandshahar	22	1	9	2	10
Chamoli	7	2	0	0	5
Dehradun	7	1	2	2	2
Deroia	16	1	3	0	12
Etah	19	1	4	2	12
Etawah	12	1	4	1	7
Faizabad	7	2	3	0	2
Farrukhabad	11	1	3	0	7
Fatehpur	6	1	1	0	4
Garhwal	8	3	2	1	2

	1	2	3	4	5	6
Ghaziabad	.	13	6	3	0	4
Ghazipur	.	9	0	3	0	6
Gonda	.	11	1	5	0	5
Gorakhpur	.	11	0	2	0	9
Hamirpur	.	12	1	3	1	7
Hardoi	.	13	0	7	0	6
Jalaun	.	10	1	3	0	6
Jaunpur	.	7	0	6	0	1
Jhansi	.	13	1	5	1	6
Kanpur	.	12	1	1	0	10
Kheri	.	9	1	5	0	5
Lalitpur	.	4	1	0	1	2
Lucknow	.	8	0	1	1	6
Mainpuri	.	11	2	5	0	4
Mathura	.	18	0	4	2	12
Meerut	.	23	3	5	0	15
Mirzapur	.	12	6	4	1	1
Moradabad	.	19	1	9	0	9
Muzaffarnagar	.	18	1	6	0	11
Nainital	.	17	6	1	1	9
Pilibhit	.	6	1	2	0	3
Pithoragarh	.	5	1	0	0	4
Pratapgarh	.	7	1	0	0	6
Rae Bareilly	.	7	1	1	0	5
Rampur	.	8	0	2	0	6
Saharanpur	.	16	1	7	0	8
Shahjahanpur	.	10	0	4	1	5
Sitapur	.	10	1	5	0	4
Sultanpur	.	4	1	0	0	3
Tehri Garhwal	.	5	3	0	1	1
Unnao	.	18	1	0	0	17
Uttarkashi	.	3	1	0	0	2
Varanasi	.	15	3	5	0	7
TOTAL	.	659	72	188	20	379
West Bengal						
24 Parganas	.	14	4	7	3	0
Bankura	.	5	0	3	2	2
Bardhaman	.	17	8	6	1	2
Birbhum	.	7	2	4	0	1
Calcutta	.	1	0	1	0	0
Darjiling	.	7	1	2	1	3
Haora	.	5	1	0	2	2
Hugli	.	6	0	4	0	2
Jalpaiguri	.	10	1	4	1	4
Koch Bihar	.	6	0	5	1	0
Maldah	.	2	0	1	0	1
Medinipur	.	16	1	11	3	1
Murshidabad	.	10	4	5	1	0
Nadia	.	10	4	3	1	2
Puruliya	.	7	0	3	3	1
West Dinajpur	.	7	4	2	1	0
TOTAL	.	130	30	61	20	19

1	2	3	4	5	6
Andaman & Nicobar					
Andamans Nicobars	1	1	0	0	0
TOTAL	1	1	0	0	0
Chandigarh					
Chandigarh	1	1	0	0	0
TOTAL	1	1	0	0	0
Dadra & Nagar Haveli					
Dadra & Nagar Haveli	1	0	0	0	1
TOTAL	1	0	0	0	1
Delhi					
Delhi U.T.	6	1	1	0	5
TOTAL	6	1	0	0	5
Daman & Diu					
Daman	1	0	1	0	0
Diu	1	0	1	0	0
TOTAL	2	0	2	0	0
Lakshadweep					
Lakshadweep	3	0	0	0	3
TOTAL	3	0	0	0	3
Pondicherry					
Karaikal	1	1	0	0	0
Mahe	1	0	0	1	0
Pondicherry	1	1	0	0	0
Yanam	1	0	1	0	0
TOTAL	4	2	1	1	0

Note : Excluding Assam.

Source : Census of India, 1981.

EVOLUTION OF URBAN PLANNING IN INDIA



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सत्यमेव जयते

Preface

The School of Planning and Architecture (New Delhi) was requested by the National Commission on Urbanisation in May, 1987 for conducting a study on 'Evolution of Urban Planning in India'. The Commission, constituted in 1985 by Shri Rajiv Gandhi, Prime Minister of India, is being chaired by Mr. Charles M. Correa and is functioning within the Ministry of Urban Development, Government of India. This study is one of the several sponsored by the Commission to receive technical inputs from related leading institutions and organisations to help it in the task of formulating policies for a balanced and desirable pattern of urbanisation in the country.

The study has attempted to trace the historical evolution of the content and scope of urban planning practice and the trends in the growth of statutory and institutional support systems. In the process, the strengths and weaknesses of the planning procedures have been identified, and the gaps, overlaps and conflicts in the existing planning legislation, development control rules, bye-laws and agencies for urban planning and development have been highlighted. Based on the summary conclusions derived from the study, recommendations have been made which can be used as guidelines for framing policies and directing the urban planning and development efforts in the country in a manner that would best serve the interests of the people.

In their endeavour to carry out the study in as comprehensive a manner as possible, given the limitations of time, the authors collected data and information from various planning and development agencies in different parts of the country through interviews and surveys. An intensive literature survey was also done. The contents of the report have been greatly enriched by valuable information received through consultations with senior professions like Professor L. R. Vagale, Prof. C. S. Chandrasekhara, Dr. K. S. Rame Gowda, Shri S. C. Gupta, Professor R. C. Gupta, and Prof. M. C. K. Swamy. The authors are highly indebted to them for their valuable advice and help. The comments and suggestions received on the Draft Report from the members of the NCU's Working Group on Physical Planning in India has helped to further refine the focus, befitting to the needs of the Commission.

The report has been divided into seven sections covering aspects of methodology, factors that influenced evolution of urban planning in India, historical overview, legal matters, organisational system, observations and recommendations of selected committees reports and court decisions on urban planning matters, and finally the conclusions and recommendations

of this study. The specific conclusions on the past and present planning practice are placed at the end of each chapter.

The authors are very grateful to the Chairman of the National Commission on Urbanisation and its members for extending to them the opportunity to work on this study. The study has generated material which will not only help the Commission in its deliberations for a viable urbanisation policy but also serve as a good reference for teaching in planning schools and for professionals in the field.

The authors wish to especially thanks Professor B. G. Fernandes and Professor L. R. Vagale who at several stages have, through their valuable guidance, encouraged them to complete the study.

The authors are extremely grateful to Prof. Bruno Dias Souza, Director, School of Planning and Architecture (New Delhi) and Prof. K. B. Singh, Registrar of the School who have very kindly extended their help and all possible facilities for its completion.

All the agencies and individuals who have directly and indirectly helped in the study have made no small contribution to this study and authors wish to thank them for their cooperation.

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Summary of Conclusions and Recommendations

An attempt has been made in this study to trace the historical evolution of the content and scope of urban planning practice and the trends in the growth of statutory and institutional support systems. In the process, the strengths and weaknesses of planning procedures have been identified, and the gaps, overlaps and conflicts in the existing planning legislation, development control rules, bye-laws and agencies for urban planning and development have been highlighted. The detailed analytical review of various situations and aspects in the report has been concluded at the end of each chapter and the recommendations in detail are brought out in the Seventh Chapter. The conclusions and recommendations derived from the study are briefly summarised below :

(A) Conclusions

- (i) Physical planning covers various aspects of spatial development such as availability of infrastructure, facilities and amenities. Compatible land use development, safeguarding physical environment, and involving people in decision-making and plan implementation with the ultimate objective of improving quality of life for all sections of society.
- (ii) The attempts for a desirable quality of life and physical environment get complicated with the increasing level of urbanisation and size of urban settlements.
- (iii) The present process of plan making and approval results in inordinate delay which nullifies validity of proposals. India needs to have planning and development approach which is flexible and based on more participatory and flexible concepts. The provisions of all related acts have to change accordingly.
- (iv) India has a rich heritage and the urban environment has been cumulatively enriched in terms of monuments building com-

plexes and areas over a long period extending from Ancient Period to the recent. Urban Planning practice of today have to sensitively protect the rich heritage and evolve suitable techniques of conservation.

- (v) The search for right kind of solutions are continuing in the field of urban planning. The use of scientific modern techniques based on computerised information and analysis and 'Remote Sensing' is becoming common and needs to be further encouraged.
- (vi) Town Planning Legislation enacted by different state governments did not provide for comprehensive and flexible planning which is accepted as most necessary for directing and regulating urban and regional development. The Model Regional and Town Planning and Development Law, recently published by the Town and Country Planning Organisation, Government of India, provides a broad legal framework for comprehensive planning. The revised law gives equal stress to planning and plan implementation and suggest a method to undertake both the functions. The Urban Land (Ceiling and Regulation) Act, 1976 was though enacted with laudable objectives, but due to large scale ineffectiveness needs systematic evolution and revision.
- (vii) There are a host of agencies involved in urban planning and development at local, state and central level, some of which have conflicting interests and work at cross-purpose. The local governments which could have become a powerful third tier (state and central being the other two) are still weak and often superseded.
- (viii) In spite of the increasing emphasis in the national Five Year Plans on the goal of a

balanced regional development in the country, no serious effort has been made towards regionalisation and institution of regional development agencies.

- (ix) Effective spatial planning (whereby population distribution will be linked to resource distribution) will contribute to development of small and medium towns and cities and would go a long way in mitigating the problems of metropolitan centres.
- (x) Master Plans, though legal documents, do not by themselves constitute implementable plans. They need to be detailed out in the form of zonal and layout plans. However, the process of preparing the master plans is so cumbersome and time consuming that detailed implementable plans for the total area covered by the plans are never completed in the lifetime of the master plan.

(B) Recommendations

- (i) India should have a guided urbanisation based on multi-level settlement policy.
- (ii) Major economic activities should be located according to a defined policy helping the desired urbanisation trend and spread.
- (iii) Planning doctrines should be to have development without environmental destruction, to generate employment, to redirect investments to basic needs, and integrated rural development.

(iv) Human Settlement design should be evolved from the old concepts bringing the quality of livability, efficiency, appearance, amenity flexibility and economic soundness.

(v) The Urban and Regional Planning Acts should be revised to include the provision of 'Model Regional and Town Planning and Development Act, 1985'. The periodic review and updating of the acts should be an accepted process.

(vi) For better environment in future, an appropriate physical planning system should be introduced at the centre, state and local level.

(vii) The role and status of local agencies should be strengthened minimising the inter-agency conflicts.

(viii) Physical planning in India, due to a large variety of situations should have varying models according to the level of urbanisation in the state/region and size and nature of settlements.

(ix) Physical planner's role should be clearly defined and he should be given appropriate place in policy formulation at Planning Commission, State Planning Boards, Ministries dealing with physical developments extensively, District Planning process, detailing out of plans, and execution of plan proposals.



1

Introduction

This introductory chapter of the report is devoted to clarifying the concept of physical planning, its structure as well as the role of the physical planner. It also discusses the scope and objectives of the study along with its methodology.

1.1 *Relevance of Physical Planning*

Physical planning deals with physical dimension of development in settlements and the intervening areas. It may also be called 'spatial planning' where development of two, three, and four dimensional spaces is in focus. Two dimensional spaces include location of various activities and the interaction amongst these activities. Three dimensional space may refer to a part of the settlement or the whole of it. This is the three dimensional space which gives rise to different types of physical and visual environment. These environments are shaped by physical planning. Four dimensional space is a modern concept of physical planning where time is added as the fourth dimension. The impact of physical environment is visualised and planned in relation to time the users/related persons will be expected to devote.

Thus, physical planning encompasses aspects of development which can never be covered by other types of planning, namely, socio-cultural planning, economic planning, political planning and administrative planning. In fact, space being the basic element for habitat and activities of living organism, physical planning is the foremost type of planning. It is physical planning which coordinates the proposals of all other types of planning and which can help them to optimise benefit and satisfaction in their respective fields.

Traditionally, the role envisaged for the physical planner was that of a 'coordinator' in the process of physical development of towns and cities. Changing socio-economic realities, consequent to typical urbanisation patterns as obtained in the developing countries, have considerably altered the situation for the

physical planners. The emerging role of planner is more in the form of a catalyst in the development process, whose expert services are required to initiate and guide the people—the beneficiaries of the plan, in the acts of development process. The era of soliciting 'public participation' is giving way to the concepts of involving people in the decision-making process, both for plan-making and plan-implementation. Besides being trained to operate the tools and techniques of physical planning, the planners of today (and tomorrow) would be required to draw upon their managerial abilities in order to tackle the realities.

Physical planners as 'City-Managers' with additional roles of 'counselling' the people and helping the masses to identify suitable investment opportunities within the framework of 'plan' is the emerging identity of physical planner in India and other developing countries.

1.2 *Structure of Prevailing Physical Planning*

India being a large country with different types of settlements and regional diversities, physical planning is carried out distinctly at national, state/regional and local levels. The scope of physical planning at these levels varies both in terms of area and details. The main agencies which are concerned with physical planning at national level are the Town and Country Planning Organisation (TCPO), the Housing and Urban Development Corporation (HUDCO), and the School of Planning and Architecture (SPA). TCPO, working as a technical department of the Ministry of Urban Development, Government of India, takes care of implementing the central schemes relating to physical planning like IDSMT, and slum improvement (EIUS), evolving new policies, and advising the Central ministries and state departments on physical planning. The evolution of TCPO's functions in detail is given in Annexure-I. HUDCO is mainly responsible for financing of housing construction but it has taken other physical planning related

functions also like promoting new design concepts, training of 'Housing Boards' personnel, etc. The SPA, New Delhi, is involved in imparting innovative education, research and extension on nearly all aspects of physical planning and development through its seven departments for Masters Degree, one department for Bachelors Degree, and five centres of Research and Extension. The marginally related department with physical planning at central level are the Architecture and Planning Division of Central Public Works Department; the Architecture and Planning Department of Defence; and the Environment Department of the Ministry of Environment and Forests.

The basic problem in dealing with physical planning in a proper way at the Centre arises because of the fact that the Five year Plans and the Annual Plans of the Planning Commission are not translated into spatial dimension. A system for introducing this relationship is missing. There is no accepted national policy of urbanisation and human settlements. However, a national housing policy is expected to be ready soon.

The structure for physical planning at state and regional levels includes state Town and Country Planning Department, Housing Board, Slum Board, Town Planning Departments in some ministries, and Department of Environment. These are created under special acts for specific functions. Their main problem is that they mainly work as intermediate links between central and local agencies for physical development. Their finances are weak. As at the Centre, the financial allocations are not based on spatial planning in advance. Some states like Tamil Nadu have gone for systematic regional planning e.g. all major city-regions, and other formal regions are delineated and planning/development agencies are established. In most of the states regional planning is limited to metropolitan/large city-regions and special resource/problem regions. Regional planning, having negligible statutory support, has been very ineffective so far.

The local level structure for physical planning includes Urban Development Authorities, Urban Improvement Trusts and Town Planning/Architecture Departments in some municipal bodies. This structure operates with a master plan, with a national/state priority scheme, and day to day developments issues of approvals and controls. The weaknesses at this level are identified in terms of shortage of trained personnel, poor financial resources, too much political interference, negligible coordination among agencies and so on.

The term 'urban planning' used in the report mainly refers to physical planning which in India is

based on rational principles since ancient times. There is a detailed description available in 'Hindu Sastras' and precisely put together in the *Mansara's Shampa Sastra*. The scientific process of the past got mixed up, over time, due to various complexities of political and socio economic conditions. This study is intended towards analysing the aspects that shaped the evolution of urban planning practice in India, and making specific recommendations for an urban planning system in future.

1.3 Scope and Objectives of the Study

Urban planning is accomplished mostly in public sector. In India, it is a state subject and is carried out in accordance with the federal set-up of the provisions of various Acts, directly and indirectly related to urban planning and development, which undergo periodical revisions as the situation demands. The study of evolution of urban planning is aimed at understanding these Acts and their implications in practice. Some efforts have been made in the past, through formal and informal committees and individuals, to analyse evolution of urban planning in India. This study has tried to take advantage of such earlier works to make a comprehensive synthesis and suggest improvements.

The National Commission on Urbanisation, Ministry of Urban Development, Government of India, considering various aspects of urbanisation in the country with a view to suggesting guidelines for a proper urban development, quantitatively and qualitatively, has decided to take up a separate study on 'Evolution of Urban Planning in India'. The main aim of the study is to provide a comprehensive statement about the state-of-the-air regarding urban planning and associated legal, political, organisational and other factors in the various parts of the country. The objectives in detail are identified as:

- (i) Identification of definable bench-marks in the evolutionary process of urban planning and development in India and their significant characteristics;
- (ii) Study of the urban planning process and control measures included in various town and country planning and related acts with their impact on the planning practice;
- (iii) Identification of the phases in the evolution of planning organisations and their functions as related to the expanding scope of planning practice; and
- (iv) Highlighting the observations and recommendations of committees, experts and judicial courts which contributed substantially

in charting out the course of planning practice in India.

1.4 Study Methodology

The study is confined mainly to qualitative aspects and is developed using the following steps :

- (i) Detailing out a draft outline of the study based on the objectives;
- (ii) Identifying a group of advisors among senior professionals who have lifetime's experience in urban planning, and presenting them study outline for comments and suggestions. The advisors having been themselves involved in the evolutionary phases of planning, could highlight details based on personal experiences;
- (iii) Carrying out literature survey through books, published and unpublished reports and references in technical papers published in reputed journals. Most of the literature is located in Delhi in the libraries of the School of Planning and Architecture, Town and Country Planning Organisation and India Institute of Public Administration;
- (iv) Refining the preliminary outline draft for the study, and designing the following three types of questionnaires :—
 - (a) Questionnaire for basic information from urban planning organisations;
 - (b) Questionnaire for basic information from urban development authorities/improvement trusts; and
 - (c) Questionnaire for basic information from housing boards/slum improvement boards/industrial development corporation/municipal corporation and others.

The outline and the questionnaires were finalised after detailed discussions with the advisory committee members. All agencies related to the above mentioned questionnaires were identified and the questionnaires were mailed out to them seeking their co-operation for basic information. Completed questionnaires were received back from 15 Town Planning Organisations, 22 Urban Development Authorities, and 11 other related agencies.

- (v) Visiting about 40 per cent agencies in different parts of the country seeking the needed

information through interviews with responsible officers in the concerned agencies.

- (vi) Preparing the draft report from systematic synthesis of the four types of informations collected from (a) members of the advisory committee; (b) literature survey; (c) questionnaire responses; and (d) interviews.
- (vii) Presenting the draft report to the advisory committee of this study and the related group of the National Commission on Urbanisation for their observations and improvement suggestions.
- (viii) Modifying the draft into final report incorporating the suggestions relating to the study objectives and scope.

1.5 Conclusions

The description has revealed that physical planning covers various aspects of spatial development particularly to :

- (a) *Provide* adequate space and infrastructures for major human activities within the settlements, i.e. living, working, recreation and communication.
- (b) *Ensure* that use of parcels of land for one activity does not hamper the growth and sustenance of other activities on adjacent land.
- (c) *Safeguard* the long term interests of the society and its physical environment.
- (d) *Involve* people in the process of decision making related to environmental and socio-cultural issues concerning plan making and implementation.
- (e) *Improve* the general quality of life for all sections of the society living in the settlements.

For a better environment in future, appropriate systems need to be introduced for proper physical planning and the role of physical planner in it. The traditional concepts about planing and planner have to be improved at all levels. In order to evolve a change based on emerging development issues, an analysis of evolutionary processes, legal provisions, organisational structure and recommendations of concerned committees is proposed for other chapters of the report.

Factors Influencing Urban Physical Planning

The factors influencing physical planning are grouped as constitutional and policy factors, general factors, nature and spread of urbanisation, its causes and consequences, relationship between urbanisation and urban growth, and impact on metropolitanisation. The conclusions of the analysis are also drawn for the sensitivity of the factors.

2.1 Constitutional and Policy Factors

Planning aims at socio-economic and environmental improvements. It derives its operational strength from the constitutional provisions at one end and from involvement of planning agencies and individuals at the other end. The constitution of the Republic of India in its article 37 and 38 Part-IV states that :

- (i) The States shall strive to promote the welfare of the people by securing and protecting, as effectively as it may, a social order in which justice—social, economic, and political shall pervade all the institutions of national life;
- (ii) The State shall in particular, strive to minimise the inequalities in income and endeavour to eliminate inequalities in status, facilities and opportunities not only amongst individuals but also amongst groups of people residing in different areas or engaged in different vocations;
- (iii) The State shall direct its policy through securing :
 - (a) that all citizens have equal right to an adequate means of livelihood; and
 - (b) that the ownership and control of material resources of the community are so distributed as to subserve the common good.

The processes of planning in general and urban physical planning in particular are influenced by these directives directly and through the dovetailing of the

goals of the Five Year Plans and the sectoral objectives. As a result of the identified focii at national level, the Seventh Five Year Plan emphasized that urban planning and development should concentrate on :

- (i) planned and integrated development of small and medium size towns and cities with a view to slowing down the growth of metropolitan cities;
- (ii) revitalisation of civic bodies;
- (iii) bringing reforms in municipal tax system and municipal administration in general;
- (iv) accelerating activities for the improvement of slums, especially for providing basic services there;
- (v) work out schemes of regular revolving of funds from state government and to establish the necessary institutional framework for channelising capital funds for infrastructure.

Such objectives are now affecting the urban physical planning and development processes. Similarly, all five year plans have put stress on changes in the planning process.

2.2 General Factors

Some of the factors, general in nature, influencing planning are the political system, legal provision, institutional frames, socio-cultural parameters, economic conditions, and physical and environmental potentials. Such factors may be identified in detail as under :

- (i) Population dynamics;
- (ii) Urbanisation pattern which has been growing selectively, i.e. rate of urbanisation is relatively high in the relatively developed regions of the country;
- (iii) Utilisation of land and agricultural productivity i.e. the economics of food production;

- (iv) Technological development with their direct and indirect impacts on human behaviour;
- (v) Rural-urban relationship;
- (vi) The forces of regionalism and internationalism;
- (vii) The quality of life, public and individual health, welfare, and security within collective as well as individual environments;
- (viii) Pattern of public administration and its responsiveness to public opinions and demands;
- (ix) Economics development i.e. growth, recession, stagnation and inflation;
- (x) Conservation and equitable distribution of renewable and non-renewable resources;
- (xi) Efforts and trends towards social justice and more equitable distribution of wealth;
- (xii) Information flows at the national, regional and local levels;
- (xiii) Changes in the governmental organisational system;
- (xiv) Changes in values and priorities with respect to poverty and the target population and the target areas;
- (xv) The emerging new hierarchies and inter-relationships of urban settlement;
- (xvi) The leading role of India as an emerging nation amongst the developing countries.

2.3 Nature and Spread of Urbanisation

Urban area and urban population in India are identified according to the census definitions which keep changing over time in accordance with the changing conditions, e.g. at one stage even some settlements having population less than 2000 were added and from 1971 a concept of urban agglomeration has been introduced where even some intervening villages are included in urban definition. The percentage of urban population doubled only in 80 years i.e. from about 11% in 1901 to 23.74% in 1981 while the size of urban population during the same period has increased by more than six times i.e. from 25.85 million in 1901 to 159.72 in 1981. The decadal increase has been too high as it was 46.09 during 1971—81, against only 0.14 during 1901—11 (Table 2.1). Thus the nature and spread of urbanisation in time in India is misleading in terms of low percentage as compared to other more urbanised countries.

The nature and spread of urbanisation in space is analysed in Tables 2.2 and 2.3 and graphically shown in Figures 2.1, 2.2 and 2.3. There is a wide variation in the level of urbanisation, ranging from 6.9% in Himachal to 35.03% in Maharashtra in 1981.

The decennial growth rate of urban population in the states is not related to the level of urbanisation. The highest growth rate of 50.11% of urban population during 1971—81 was found in Sikkim where urbanisation level was only 16.23% in 1981; similarly, the growth rate of rural population and total population, and population density also do not have any relationship with the level of urbanisation. States can be grouped into six categories for their varying level of urbanisation. The Union Territories having high urbanisation, ranging from 42.04% to 93.06% fall under the seventh category. Spatially, the states of western coast with the exception of Kerala have been occupying a high place for their level of urbanisation while the states of H.P. Arunachal Pradesh, Assam, Meghalaya, Bihar and Orissa have maintained a lower level. The other states have been changing their relative places for urbanisation.

2.4 Causes and Consequences of Urbanisation

Urbanisation is a natural constituent of civilisation and development. There have been some urban centres from the very beginning of settled agriculture. In general, the number and size of urban centres have been increasing due to the increasing non-agricultural activities. The temporal and spatial differences in the level and growth rate of urbanisation, as discussed above, have been due to the following causes :

- (i) Relative geographic advantages which can be in terms of quality of land terrain, geology, hydrology, climate, centrality and place for change of transportation mode. The more advantageous locations and areas have been getting more urbanised.
- (ii) Historical background of places also attracts more urban population. Historical causes of more growth may be due to several other factors like accessibility, safety, socio-cultural values, etc.
- (iii) Increase in trade and commerce activities in any area results in an increase in administrative, financial, and transportation activities and thus urbanisation grows faster.
- (iv) Increase in industrial activities gives birth to a large number of other activities. A big portion of today's urbanisation is due to industrialisation.
- (v) Government policies—actions which are in terms of developing some new townships for specific purposes, opening new areas of faster development etc. have also been direct cause to raise and accelerate urbanisation.

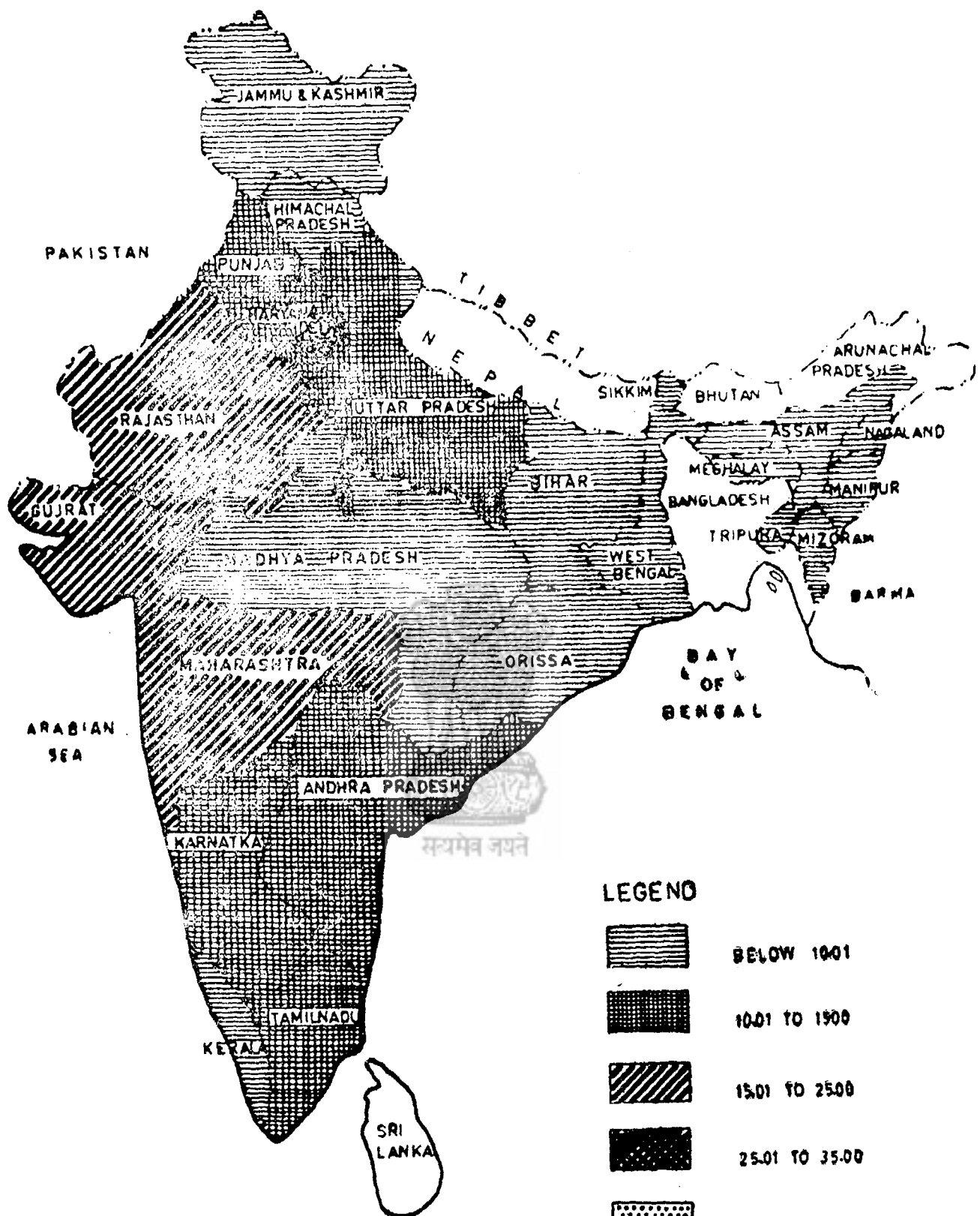


FIG. 2.1
LEVEL OF URBANISATION 1901

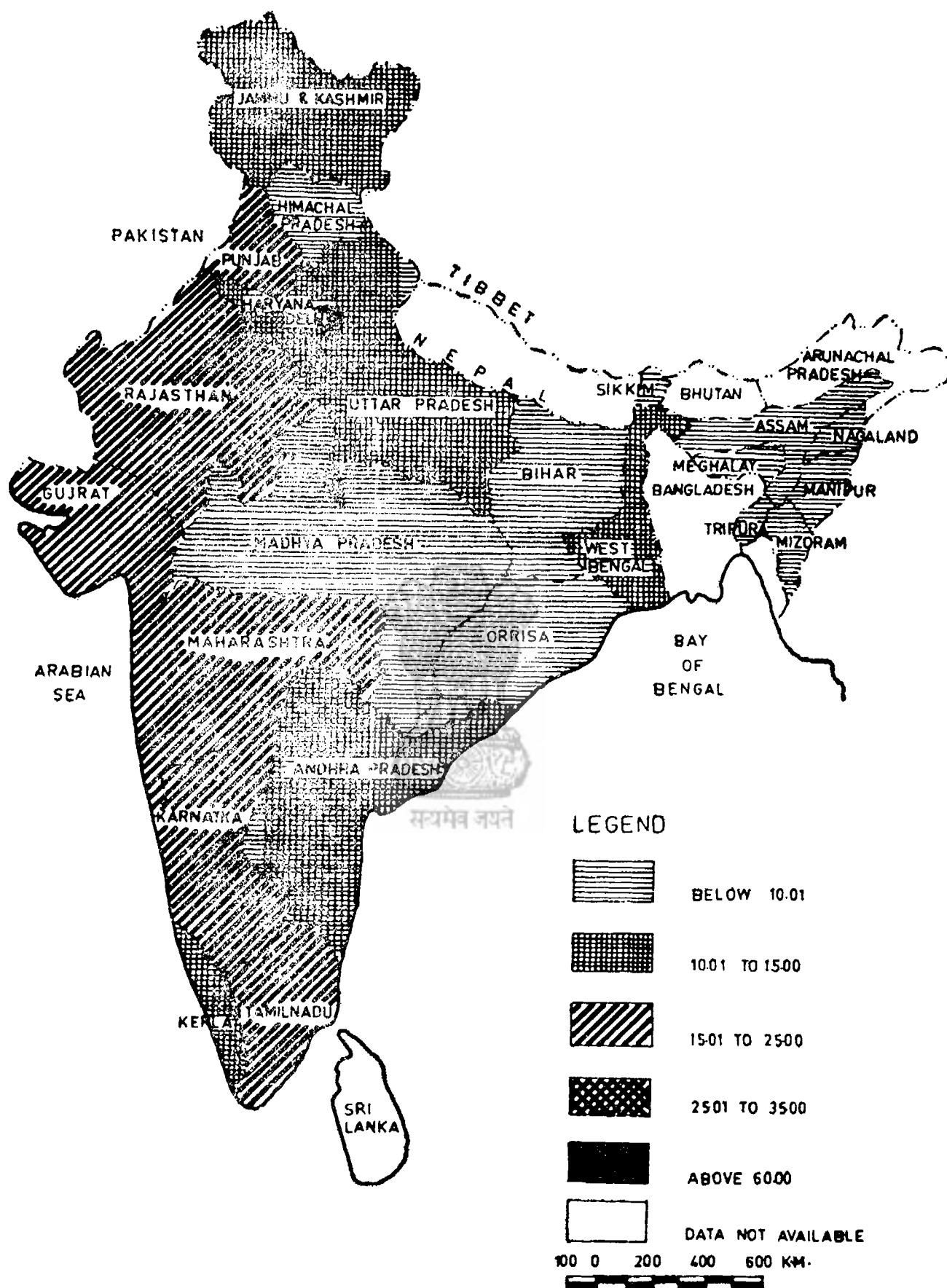


FIG. 2.2

LEVEL OF URBANISATION 1941

16—507 NCU/88

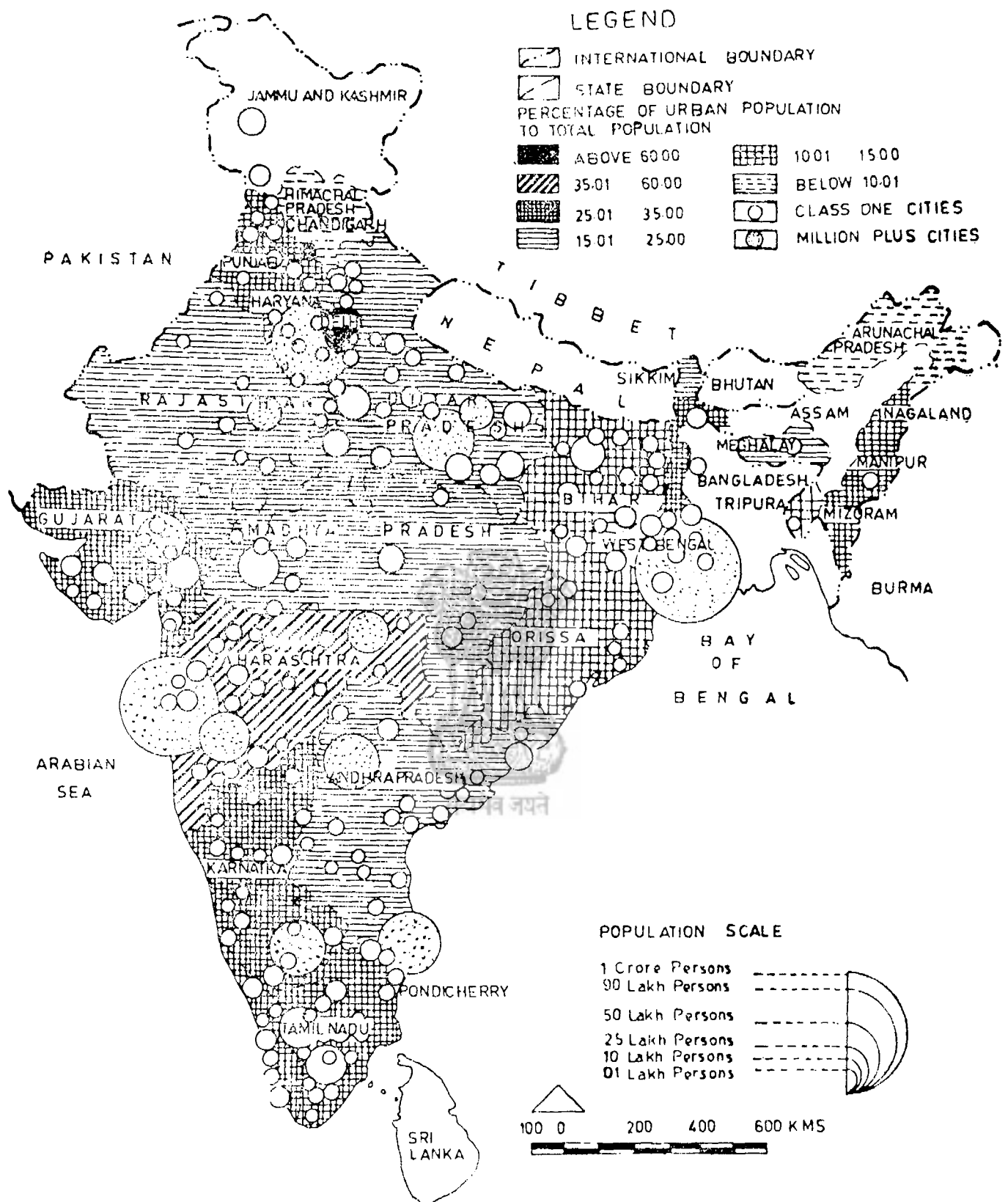


FIG. 2.3

LEVELS OF URBANISATION AND IMPORTANT URBAN AREAS 1981

- (vi) Natural and man-made disasters have occurred in all periods. These in the form of droughts, famines, cyclones, earth-quakes, riots, wars and territorial partitions have been the cause of population movement and concentration in space differentially.
- (vii) Push and Pull factors working for urbanisation have been analysed by several research studies. It is noted that push from rural to urban and pull from urban to rural both work together. The reasons associated with push and pull urbanisation are socio-cultural, differentiation in employment opportunities, higher and regular incomes, attraction of scale of economies, holding capacity, and better quality of life.
- (viii) Total population size is closely related to the size of urban population. The absorption capacity in agriculture under traditional conditions are limited. The increase in total population forces the large part of additional population to go for secondary and tertiary activities which are essentially urban based.

Urbanisation in its philosophical meaning should have only positive consequences but in reality it has both positive and negative consequences which can be listed as under :

Positive Consequences

- (a) Generation of more wealth
- (b) Evolution of new technologies
- (c) Increase in consumption and production level of individuals
- (d) More and better national and international integration.
- (e) Creation of more nuclear families, multi work unit families, and thus less dependency.
- (f) More elastic and diversified economies.
- (g) More open societies reducing socio-cultural and regional differences.
- (h) Urban centres work as nerve centres for spread of information, knowledge and services.

Negative Consequences

- (a) Over-urbanisation
- (b) Large slums and unauthorised growth of sub-standard conditions
- (c) Overall poor quality of life
- (d) Trend of concentration in some areas and some types of urban settlements

- (e) High cost of living
- (f) Problem of conservation of traditional values and features, and resources
- (g) Dichotomy within urban area and between urban and rural area is increasing
- (h) Problem of easy, cheap and safe movement, and communication
- (i) Problem of law and order
- (j) Problem of land, water and air pollution, i.e. disturbances in ecosystem.
- (k) Backwash effects in rural areas.

2.5 Relationship between Urbanisation and Urban Growth

The growth pattern of urban settlements in time is a good measure for relationship between urbanisation and urban growth. It is noted (Table 2.4) that during 1901–71, the number of class VI urban settlements, in general, has been decreasing while the number of urban settlements of class IV, III, II & I (having population 20,000 and more) have been continuously increasing and settlements of class V (with population 5,000–10,000) increased upto 1951 but decreased afterwards. This indicates that urbanisation has induced growth in large urban settlements only. Further, the increase during 1901–71, 504% for Class I, 324% for class—II, 188% for class—III and 116% for class—IV reveals that there has been direct relationship between urbanisation and the increase in number of classwise urban settlements. The Government policy for reorienting urban growth from 1971 onwards has shown a clear impact as during 1971–81, the class—II urban settlements had a greater increase in number (51%) as compared to class—I urban settlements (49%) and the urban settlements of Class—V and VI which were decreasing in number again started growing with a significant percentage (class V—14% and class VI—53%). Assuming that the present efforts of reorienting urban growth will be more intensified the number of class V and VI will increase by 48% & 30% respectively during 1981–2001 when class I towns are projected to grow only by 39%.

The distribution of urban population in different classes of urban areas indicates that the share of class I urban settlements will continue to be higher but grow slowly only (Table 2.4); the share of urban population living in class VI will slowly increase which was continuously decreasing in the decades from 1901 to 1971. It has risen from 0.46 to 0.50% during 1971–81 and will reach to about 1.5% by 2001.

2.6 Urbanisation Impact on Metropolitanisation

The share of urban population living in metropolitan cities has kept increasing over the decade. It was 26.91% in 1981 against 5.81% in 1901, 10.23% in 1931 and 23.01% in 1961 (Table 1). This means that more than one-fourth urban population in India is living in metropolitan cities. Contrary to this, the number of metropolises is only 12 against 3245 urban settlements. The trend indicates that the process of metropolitanisation will continue. Employment and investments opportunities will be increasingly located in the major urban centres. Vast multitudes of people will continue flowing into metropolitan cities in pursuit of economic opportunity and social security. There is an increasing number of skilled and unskilled labour. This is resulting into loosening of human scale and breaking of social values. An environment full of contradictions is in making. For example, exceedingly high densities in the central areas against the very low densities in the peripheries, production and consumption of the maximum quantum of goods and services yet inadequacy of the minimum public utilities and facilities, presence of most extensive network of transport and communication yet inefficient and uneconomical, having the maximum of urban housing still serious problems of homeless squatters and over-crowding in rooms, availability of sophisticated shopping facility at centres against an indiscriminate springing up of shops in the growing suburbs.

2.7 Conclusions

The analysis of six categories of factors influencing urban physical planning indicates that the provision of desirable quality of life and physical environment get complicated with the increasing level of urbanisation and size of urban settlements. Others factors also get affected by this situation. The ranking of factors influencing planning in terms of their sensitivity i.e.

strength of interactions with other factors may be identified as :

Rank I : Process of Metropolitanisation

Rank II : Relationship between Urbanisation and Urban Settlement Patterns

Rank III : Nature and Spread of Urbanisation

Rank IV : Causes and Consequences of Urbanisation

Rank V : Constitutional and Policy Factors

Rank VI : Other General Factors

Such ranking of influencing factors implies that the system of physical planning should change from simple and conventional techniques to new and more scientifically rationalised techniques. India having a very wide range of urban situations should not search for any single planning process and technique. Physical planning contents and processes may be based on :

(A) Levels of Urbanisation by regions as :

- (i) Low Urbanisation—below 15% (Eastern India)
- (ii) Medium Urbanisation—15% to 25% (Central India)
- (iii) High Urbanisation—More than 25% (West Coast)

(B) Size of Urban Settlements as :

- (i) Megalopolis and Metropolis (Popn. more than 1 million)
- (ii) Cities (Popn. 0.1 to 1 million)
- (iii) Medium Size Towns (Popn. 20 to 100 thousands)
- (iv) Small Towns (Popn. less than 20 thousands)

(C) Nature of Urban Settlements as :

- (i) Existing Urban Settlements
- (ii) New Urban Settlements

Evolutionary Stages of Urban Planning in India

Historically, five significant periods can be identified through which the evolution of urban planning has taken place in India, viz. (i) Ancient period; (ii) Hindu period; (iii) Muslim period; (iv) British period; and (v) Post-Independence period. The planning bench-marks of these periods are identified and described below.

3.1 Ancient Period

The principles of planning in ancient India are enunciated in Manasara's *Shilpashastra* and Kautilya's *Arth Shastra*. The planning principles during the period were formulated in such a manner as to reflect the religious belief of the people. The places of worship used to be the focal points in the town layouts. Since in most cases the religious activities used to take place under the patronage of the rulers, the seat of government and the places of workshop were commonly recognised as the original locations around which the towns grew. Caste hierarchies defined the social and occupational structures of the society and in turn determined locations of residential areas for different social groups within a settlement. The linkages between various residential areas and also between each residential area and other public places, such as markets, parks, etc. were based on the same principles. The location of town gates and the directions of roads moving out of the settlements were related to cardinal directions. Next to religion the factor that most prominently governed the planning settlements in this era was that of security. Thus, the city walls, gates and moats became the essential features of the human settlements.

The structure of settlements was defined in a scientific manner wherein specific areas were earmarked for different uses such as markets, handicrafts manufacturing areas and recreational facilities like gardens and chowks (town squares).

Among the ancient treatises "*Vastu Shahstra*" treats village planning in intricate details as it was considered a habitat more close to nature, compared to

the towns. Though the planning principles of an Indo-Aryan house, a village and a town were similar but Manasara, Mayamuni and others have classified the village and towns in the following ten types : (See enclosed Figures 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 and 3.10).

- (i) Manduka
- (ii) Paramasayika
- (iii) Dandaka
- (iv) Sarvatobhadra
- (v) Nandyavarta
- (vi) Padinaka
- (vii) Swastika
- (viii) Prastara
- (ix) Karmuka, and
- (x) Chaturmukha

These types of layouts were based on detailed considerations relating to :

- (a) The site in terms of planting trees, ground fitness, colour and texture of soil, smell, taste, shape, direction, sound productivity and other geological characteristics;
- (b) The boundaries and approaches in terms of size, shape, height/depth, materials of construction surface treatments, types of bridges, importance and character of 'Gopurams' (Gateways);
- (c) The street patterns in terms of their purpose and layout, their width according to their classification, street naming systems, refining the aesthetic character of streets by the introduction of arches, gates and the architectural styles of the adjacent buildings, sidewalks, foot-paths and drainage system, etc.; and
- (d) The emphasis on the folk areas, that were the social meeting places for various purposes.

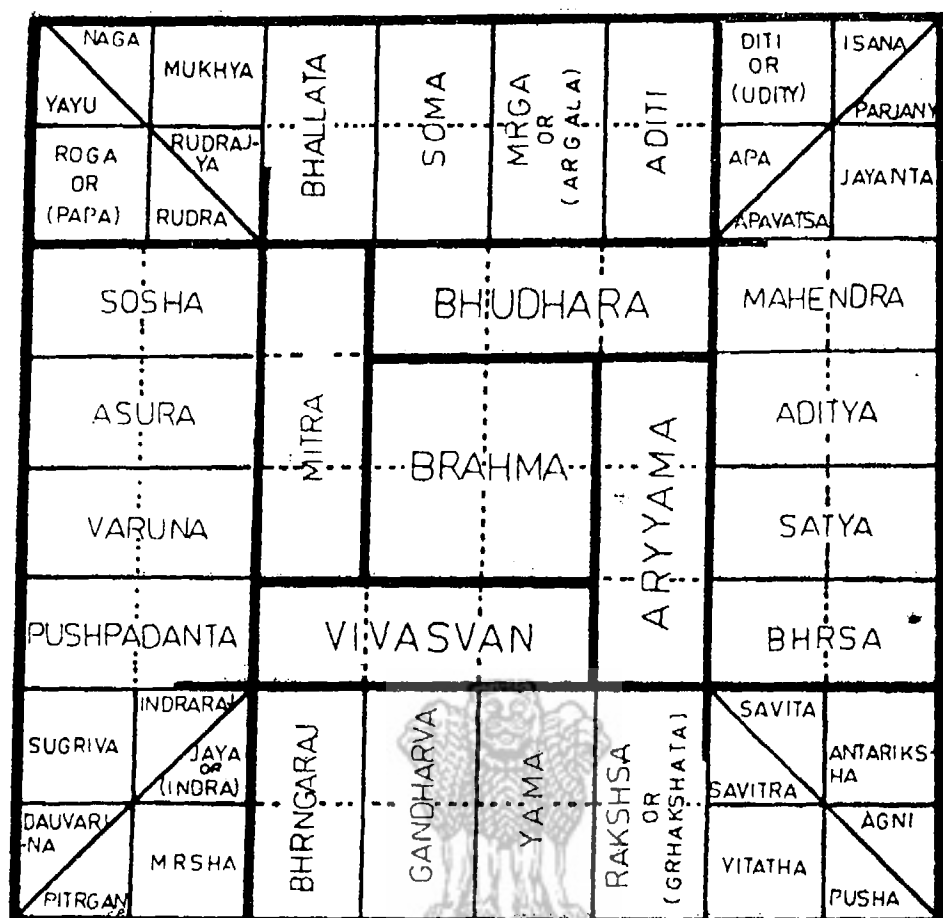


Fig. 3.1

MANDUKA OR CHANDITA

N.B. : EXAMPLE OF SITE PLANNING BASED ON THE PRINCIPLES OF SILPA SASTRA. THE AREA UNIT IS THE LOWEST IN HIERARCHY, ASIGNING SQUARE PLOTS TO VARIOUS VARNA PEOPLE BY THEIR DEITIES. IT HAS FIXED 64 PLOTS.

YAYU	NAGA	MUKHYA	BHALLATA	SOMA	MUGA OR (ARGAL)	ADITY	DITI OR (UDITY)	ISANA
ROGA OR (PAPA)	RUDRA	MUKHYA	BHALLATA	SOMA	MUGA OR (ARGAL)	ADITY	APA	PARJANYA
SOSHA	RUDRA- JAYA	BHUDHARA				APAVATSA	JAYANTA	
ASURA							MAHENDRA	
VARUNA	MITRA	BRAHMA				ARYAYAMA	ADITYA	
PUSHPADANTA							SATYA	
SUGRIVA	INDRARAJ	VIVASVAN				SAVITA	BHRSA	
DAUVARIN A	INDRA OR (JAYA)	BRNGRAJ	GANDHARVA	YAMA	RAKSHASA OR (GRHAKSHATA)	VITATHA	SAVITRA	ANIRAKS- NA
PITRGA- NA	MRSKA	BRNGRAJ	GANDHARVA	YAMA	RAKSHASA OR (GRHAKSHATA)	VITATHA	PUSHA	ACTH

FIG. 3.2 PARAMASAYIKA

N.B. : THIS IS AN EXAMPLE OF SITE PLAN-
NING BASED ON THE PRINCIPLES OF
SILPA SASTRA. THE AREA UNIT IS
THE LOWEST IN HIERARCHY, ASIGN-
ING SQUARE PLOTS TO VARIOUS
VARNA PEOPLE BY THEIR DEITIES.
IT HAS FIXED 81 PLOTS.

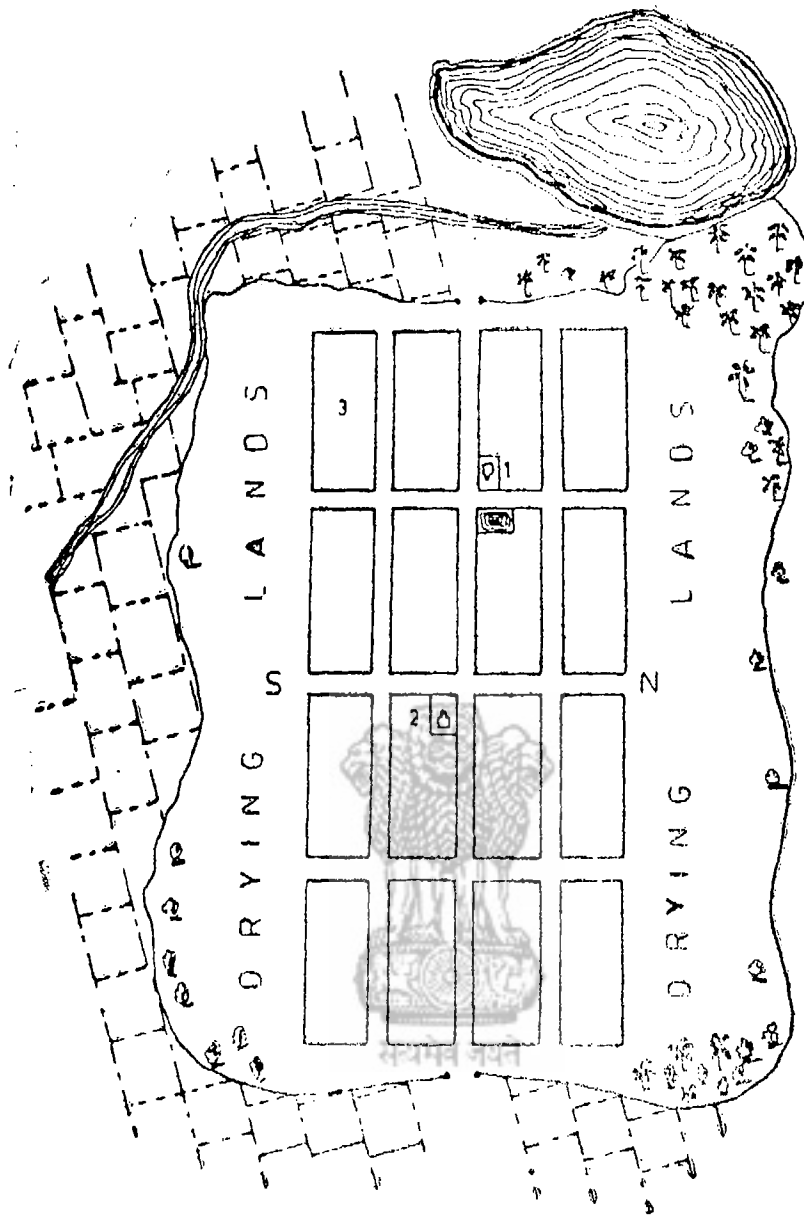


FIG. 3.3 DANDAKA TYPE OF TOWN PLAN

1. VISHNU TEMPLE
2. SIVA TEMPLE
3. SCHOOL, COLLEGE, ETC.

N.B. : PLAN IS SUITABLE FOR A VILLAGE
 DUE TO ROW OF HOUSES ALONG
 ROADS IT RESEMBLES PHALANK OR
 A STAFF AND SO CALLED DANDAKA.
 EACH HOUSE IS PROPOSED TO BE
 THREE OR FOUR OR FIVE DANDAS
 BROAD ACCORDING TO ITS PLACE-
 MENT AND THE LENGTH IS TWICE
 OR THRICE THE WIDTH. FOUR
 GATES ARE TO BE DEVOTED TO
 MAIN DEITIES.

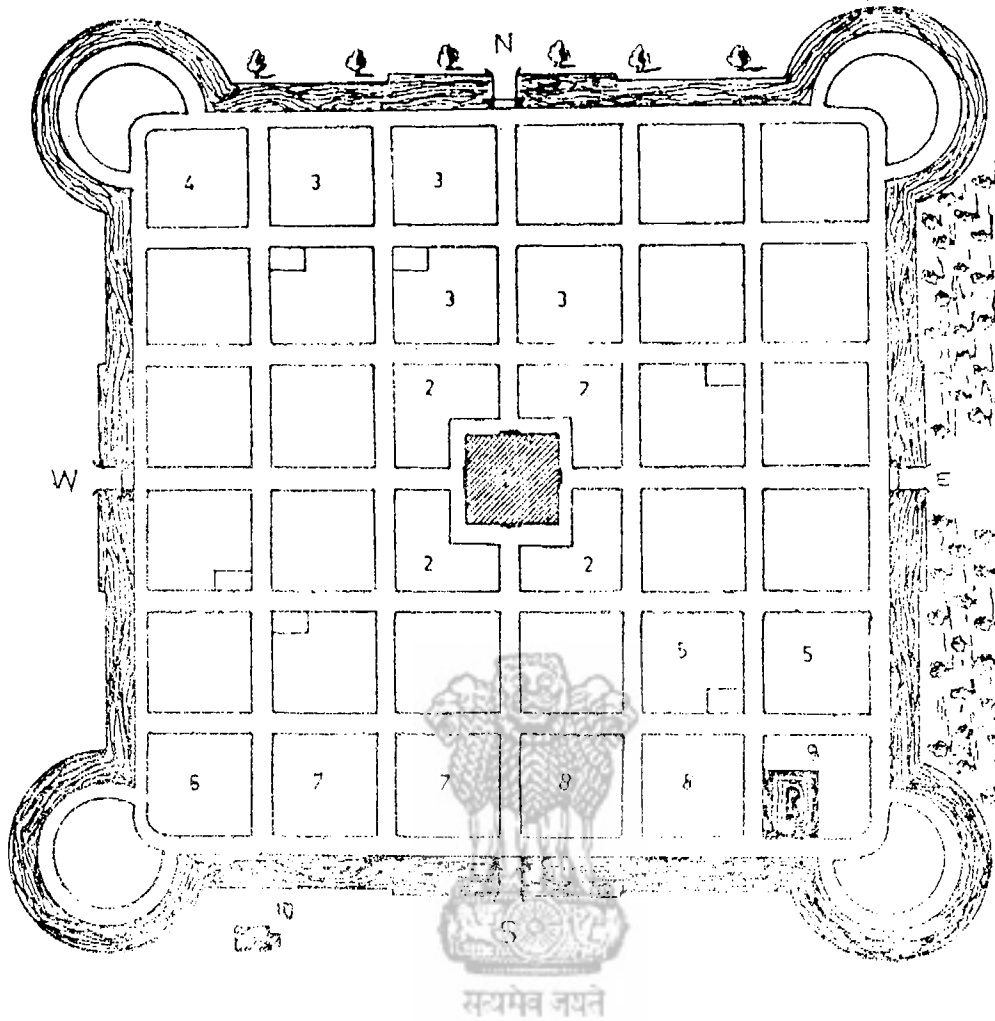


FIG. 3.4 SARVATHOBHADRA TYPE OF TOWN PLAN

1. TEMPLE
2. BRAHMINS
3. SUDRAS AND OTHERS
4. COLLEGE
5. WEAVER, CLOTH MERCHANTS, PHYSICIANS, ETC.
6. HOSPITAL
7. WORKMEN'S HOUSES
8. WORKSHOPS
9. MONASTERY
10. CHAMUNDI OR KALI TEMPLE

N.B. : APPLICABLE TO LARGE VILLAGES AND SMALL TOWNS ON SQUARE SITES. A TEMPLE DOMINATES THE SETTLEMENT.

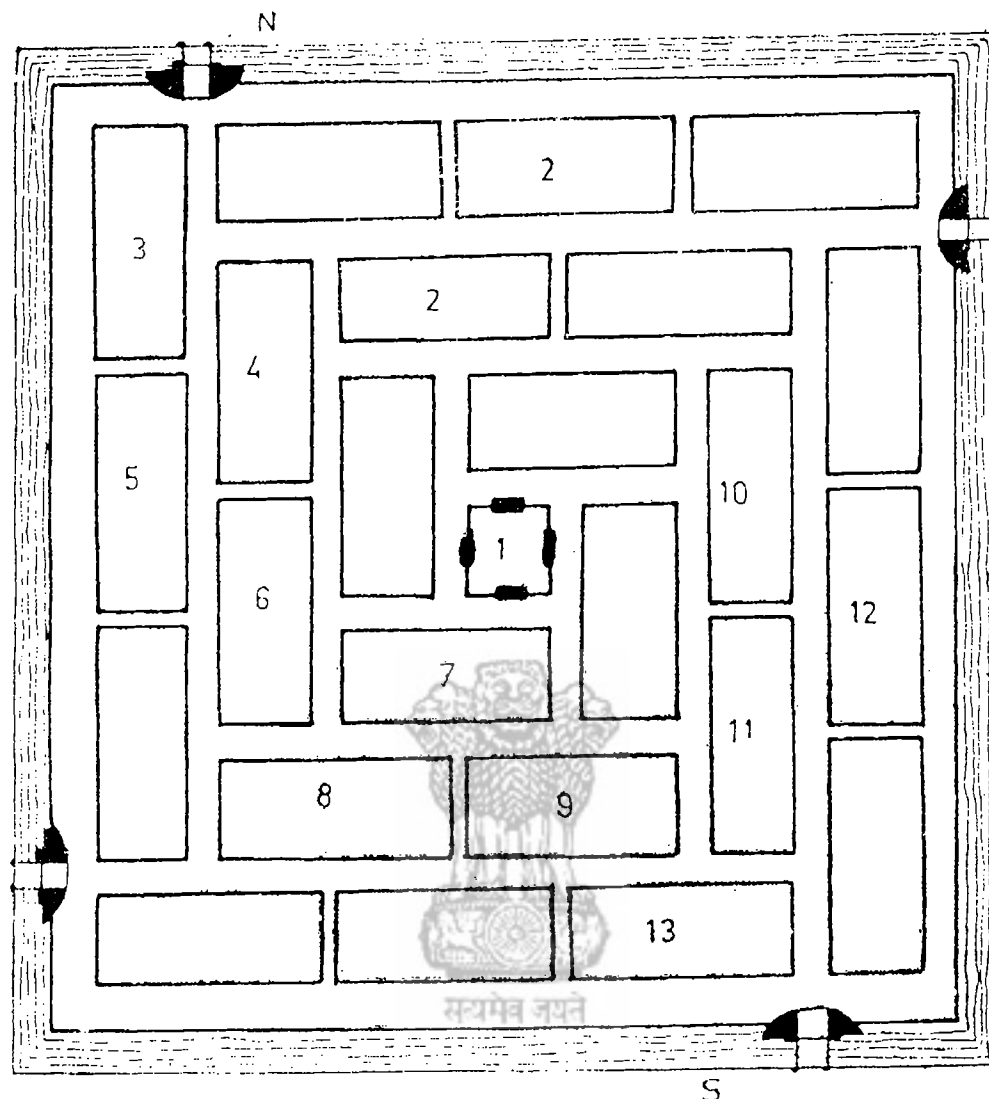


FIG. 3.5 NANDYAVARTA TYPE OF TOWN PLAN

1. SIVA OR VISHNU TEMPLE
2. BRAHMIN QUARTERS
3. SCHOOL, COLLEGE, ETC.
4. PALACE
5. HOSPITAL
6. COURT
7. TANK
8. MONASTERY
9. & 10. RESIDENCES FOR OTHER CASTES
11. ARTISTS & THEIR HOUSES
12. THEATRE, ETC.
13. QUARTERS FOR FISHERMEN AND HUNTERS

N.B. : NANDYAVARTA IS THE NAME OF A FLOWER HAVING THE SUGGESTED SHAPE. THIS TYPE IS TO ACCOMMODATE ABOUT 3000—4000 HOUSES.

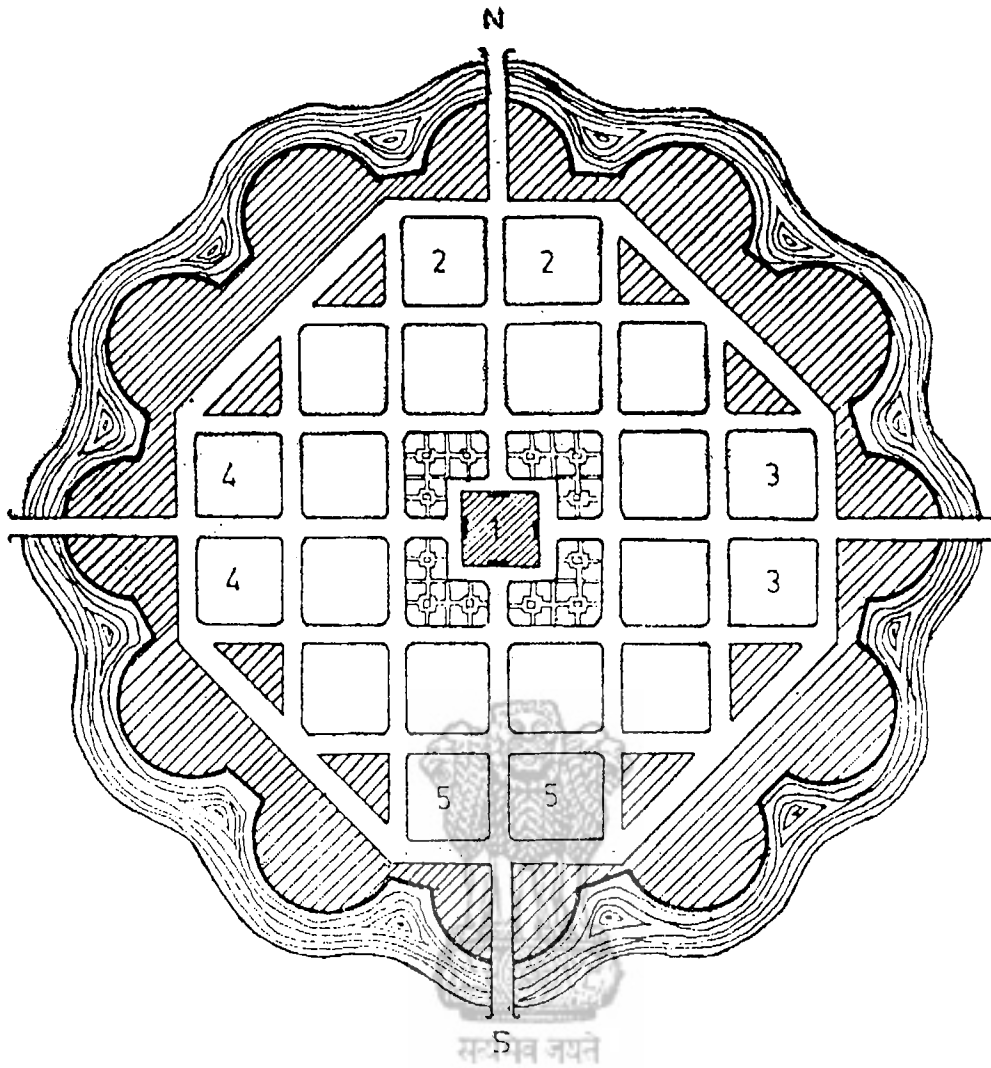


FIG. 3.6 PADMAKA TYPE OF TOWN PLAN

1. TEMPLE
2. PALACE
3. SHOPS AND VEGETABLE STALLS
4. MEAT MARKET
5. SHOPS FOR OTHER ARTICLES
6. TANK

N.B. : PLAN RESEMBLES THE PETALS OF LOTUS RADIATING OUTWARDS FROM THE CENTRE. HAVING WATER ALL AROUND NO SCOPE FOR EXPANSION. IT HAS FIVE VARIETIES.

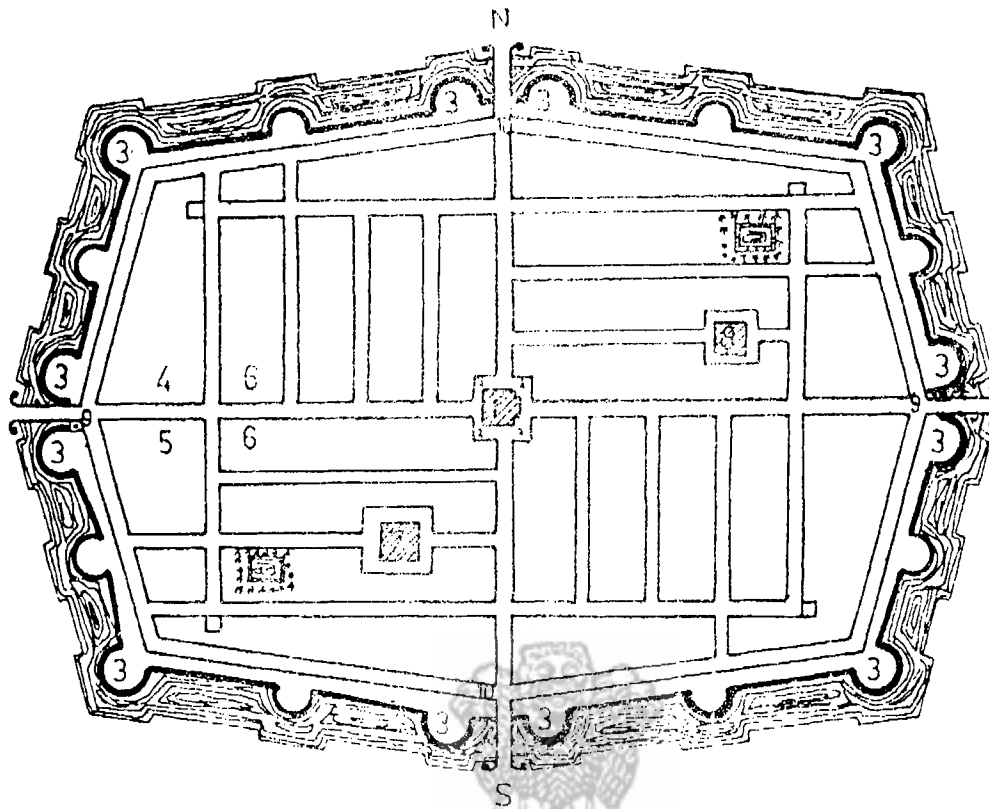


FIG. 3.7 SWASTIKA TYPE OF TOWN PLAN

1. SIVA OR VISHNU TEMPLE
2. AGRAHARAM
3. ARMOURY
4. KING'S PALACE
5. YUVARAJA'S PALACE
6. COURT AND OFFICES
7. JAIN TEMPLE
8. BUDDHIST OR SARASWATI TEMPLE
9. GANESHA TEMPLE
10. KALI TEMPLE

N.B. : THE SITE MAY NOT NEED TO BE
SQUARE OR RECTANGLE

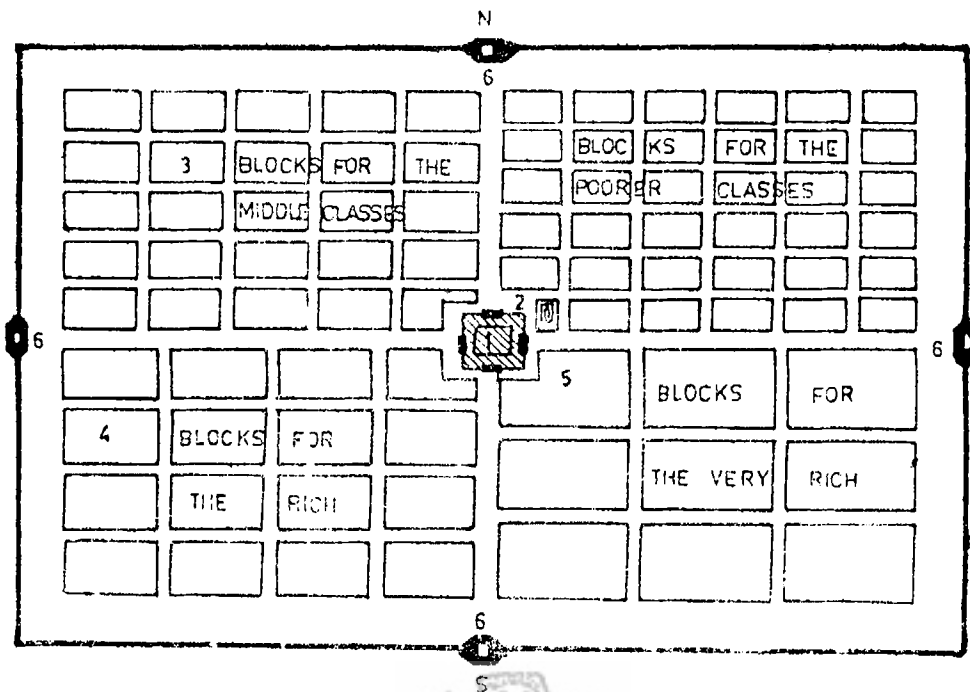


FIG. 3.8 PRASTARA TYPE OF TOWN PLAN

1. SIVA OR VISHNU TEMPLE
2. THE TEMPLE TANK
3. COLLEGE
4. HOSPITAL
5. MONASTERY
6. GATES

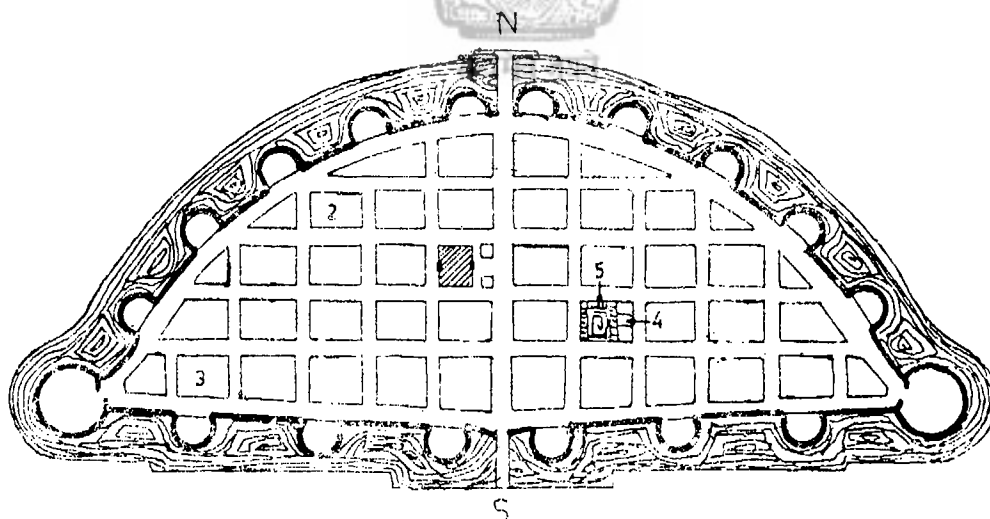


FIG. 3.9 KARMUKA TYPE OF TOWN PLAN

1. SIVA OR VISHNU TEMPLE
2. COLLEGE
3. HOSPITAL
4. MONASTERY
5. TANK

N.B. : SUITABLE FOR SITES ALONG SEA SHORES OR RIVER BANKS WHERE THE SITE IS IN THE FORM OF A BOW OR SEMICIRCULAR OR PARABOLIC.

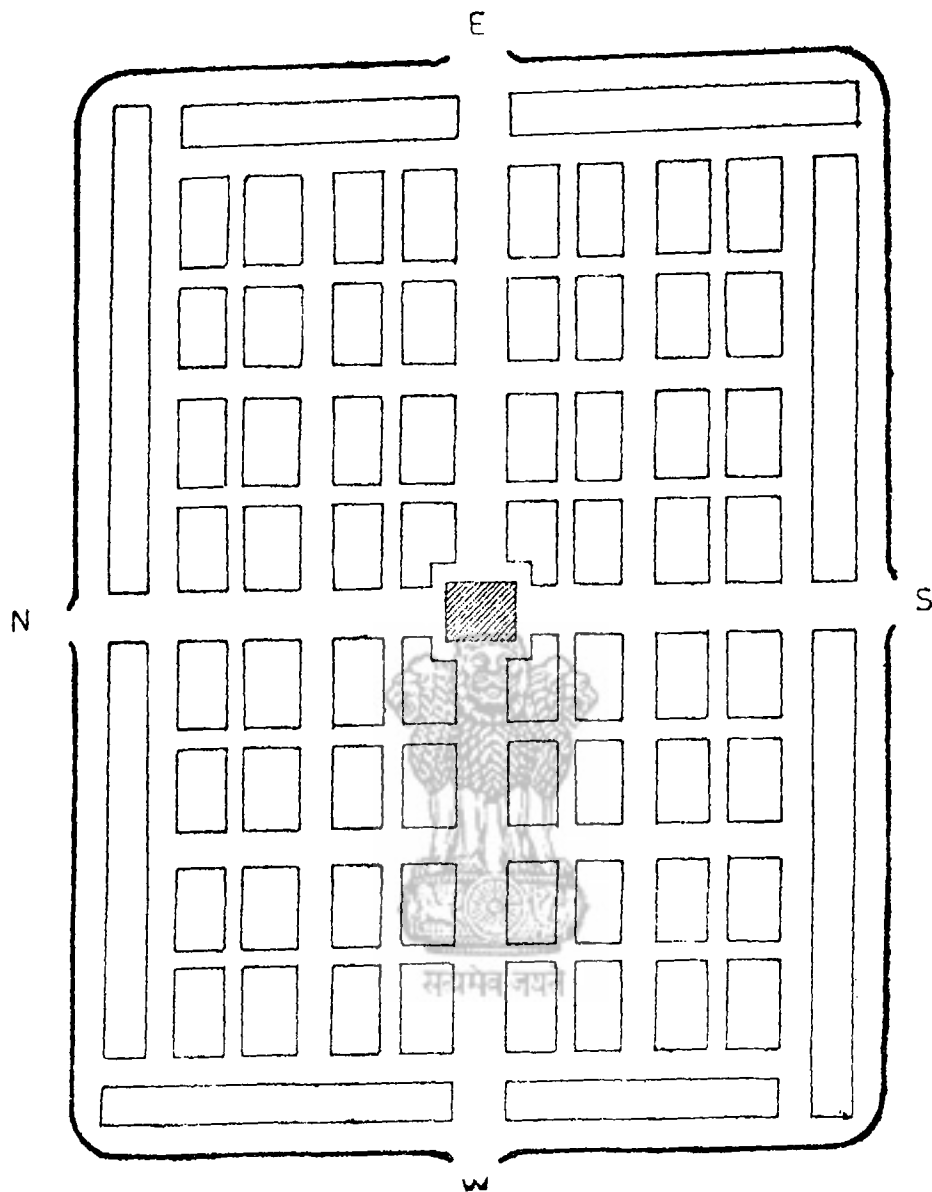


FIG. 3.10 CHATURMUKHA

N.B. : APPLICABLE TO ALL SIZES OF TOWNS AND VILLAGES. MOST OF ANCIENT TOWNS ARE BASED ON THIS TYPE WHERE TOWN IS LAID OUT EAST TO WEST LENGTHWISE AND BUILDINGS ARE BASED ON A MODULAR SYSTEM.

Some of the popular examples of planned towns of this period are—Ayodhya, Indraprastha, Madurai, Vanji, Kaverippumpattinam, Kanchipuram, etc.

3.2 Hindu Period

Urban planning during this period was signified mainly by the modified planning practices of ancient period. A number of large towns flourished during this period either as capital towns for various kingdoms, or religious towns with the blessings of sages and mendicants. The major factors that influenced urban planning during this period were the Hindu religious values, planning principles of ancient India, strong regional linkages and dominant security aspects. There are evidences that during the Maurya and Gupta periods, separate urban planning and development agencies existed. Such institutions were at its zenith during the period of Chandragupta Maurya.

3.3 Muslim Period

Muslim rulers brought with them the memories of the Arab and Persian towns and their culture to the Indian towns and cities. The towns built by the Moghal emperors were signified by the locations of 'place of worship', royal gardens, 'baghs' (gardens), and 'bazars' (market places) studded with fountains and canals of rippling water. The common man was free to build his own house within the confines of city wall according to his social and economic status. The Moghul kings were great monument builders. Their love for symmetry and axial planning led to creation of many splendid garden and palace layouts and location of 'bazars' as prominent axes. These monuments, specially the places of worship and royal palaces enriched the skyline of the towns and cities during this period. Notable examples of such creations are Shahjahanabad (Delhi), Fatehpur Sikri, Lucknow, Agra, etc.

3.4 British Period

During this period two distinct phases of evolution of urban planning can be identified and the developments can be classified into two sub-periods: (a) Upto 19th Century; and (b) 20th Century upto 1947.

Upto the last decade of 19th century, urban planning was mainly concerned with construction of roads and maintenance of the existing developed areas. Town Planning as a profession was undergoing rapid changes in England and its effect was visible in India also. Significant mention must be made of the year 1898 when Bombay Improvement Trust was created under the City of Bombay Improvement Act of the same year. The Trust was empowered to draft and implement town planning schemes within its area of

jurisdiction. After Bombay, improvement trusts were created in a large number of cities such as Agra, Kanpur, Nagpur, Delhi, Calcutta, etc. Some of the other activities in which these trusts were engaged, were those of improving extremely congested areas by slum clearance and undertaking housing projects for lower income groups. Later, during the 20th century some of these improvement trusts ran into difficulties and were merged with municipalities—the newly-created authorities with wider powers. However, some of the improvement trusts continued working. Municipalities were created by the British during 19th century in many towns and cities with the main task to maintain community facilities and services.

Later, some municipalities were empowered by respective state governments to undertake limited urban development works and regulation activities to restrict haphazard growth of towns and cities.

By 1915, some of the states began to enact town planning legislations. The earliest town planning law was the Bombay Town Planning Act, 1915. The U.P. Town Planning Act, 1919 and Madras Town Planning Act did not seek to create any special authority for planning and development. Madras Town Planning Act made it obligatory upon local authorities to prepare general town planning schemes with respect to land under their jurisdiction and in the immediate vicinity. Madras Act also provided for a state planning department, improvement trusts, and land acquisition with compensation and betterment levy. The year 1915 was also significant owing to the visit of Patrick Geddes to advise on matters of town planning and development of existing towns and cities. The mode of planning suggested by Patrick Geddes, based on his postulates of "place-work-and folk", challenged the prevalent official planning based on engineering and business conventions. His methods of diagnostic survey and conservative surgery was illustrated in the improvement schemes prepared by him for towns like Tanjore, Madurai, Balrampur, Lucknow, Indore, etc.

Also following the principles of garden cities the planning and development of New Delhi (1919) by Sir Edwin Lutyens is another important land mark in the evolution of urban planning during this period. The concept of 'Garden City' continued to influence the planning of new towns even after the independence of India. During the British period the advent of railway lines created new physical planning situation in most of the towns and cities in India. Creation of civil lines and cantonments at important locations adjacent to the existing towns was another significant development of this period.

After World War-II the only important event from the point of view of urban planning was the publica-

tion of a Report in 1946 by the Health Survey and Development Committee under the chairmanship of Sir Joseph Bhore, which resulted in the creation of a Ministry of Housing and Town Planning in every province. Strengthening the Directorate of Town Planning at state level and appointment of an expert in Central Ministry of Health to advise on matters related to urban planning.

3.5 Post-Independence Period

First major activity in terms of town planning was to cope with the tremendous problems of refugee rehabilitation just after the partition of the country. This problem of resettlement of displaced persons resulted into a number of planned new towns in erstwhile Punjab. Faridabad, Nilokheri and Rajpura are some examples of this activity. In the beginning all these new towns and also the mandi towns started coming up with a very heavy residential areas components, whereas other land uses were not organised in detail. Later on comprehensive master plans were prepared for these towns.

By this time, at the state level also, the limitations of town planning schemes to take care of the problems of growing towns and cities were becoming evident. A need was felt to prepare master plans for the towns and cities as a co-ordinated set of proposals for physical development.

In 1951 two major events can be termed as important benchmarks—(a) Launching of the First Five Year Plan; and (b) Setting up of the Institute of Town Planners, India. The major objectives of setting up of the Institute were :

- (a) To advance the study of town planning, civic design and kindred subjects and of the sciences and arts as applied to those subjects; and
- (b) To promote planned economic, scientific and artistic development of towns, cities and rural areas, etc.

The First Five Year Plan (1951—56) gave impetus to planning of urban areas. It suggested that there should be a National Town and Country Planning Act, which would provide for zoning and planned use of land, control of 'ribbon development' location of industries in areas considered suitable, clearance of slums, carrying out of diagnostic surveys and preparation of master plans. However, no such action, was taken with respect to legislation of such an Act.

Although started in 1949 as a project, the final plans for Chandigarh were finalised by Le Corbusier in 1951 and thereafter. Chandigarh plan, with all its

trials and tribulations, is a landmark in the evolution of urban planning during the post-independence era. Another important event was the creation of Town Planning Organisation (TPO) at Delhi under the Ministry of Health in 1955. The TPO was entrusted the responsibility of preparing a comprehensive development plan for Delhi. During the First Plan, two schools of Planning at Delhi and Kharagpur were started to meet the needs of trained town planners.

The Second Five Year Plan (1956—61) laid down the following five principal directions for urban and regional planning :

- (a) Each state should have a phased programme for the survey and preparation of master plans for all important towns. Cities like Bombay, Delhi, Calcutta, Madras, Allahabad, Hyderabad, Kanpur, Lucknow, and Poona etc. were recommended for early attention;
- (b) Regional plans should be prepared for the new towns that have come up and for those that are likely to come up with industrial progress in future;
- (c) River valleys should be developed with an eye on the specific developmental needs of the area and their inherent potentials. Areas recommended for detailed study were Damodar Valley, Bhakra Nangal, Hirakud and Chambal;
- (d) Town and country planning legislation should be enacted in all the states and machinery for its implementation should be set up; and
- (e) Development programmes envisaged under various sectors of the plan should be integrated and its impact on urban and regional planning be monitored.

Delhi Master Plan was published in 1962 and since then it has acted as a model for preparation of a comprehensive master plan/development plan all over the country.

The Third Five Year Plan (1961—66) provided for the preparation of master plans for all major cities (above 100,000 population). Metropolitan Regional plans and the regional plans for industrial areas, resource regions and river valley regions, under various schemes of central government assistance. Town and Country Planning Organisation became the central agency helping the states in preparation of master plans for cities and approving central grants for the purpose. The Third Five Year Plan also addressed itself to the impact of centralisation or decentralisation

of industries, polarisation of growth in a few metropolitan cities, etc. The plan provided some guidelines for location of industries, in relation to existing urban development.

The Fourth Five Year Plan (1967—74) asserted the need of measures to restrict the growth of largest urban centres.

In 1966, Basic Development Plan for Calcutta was published by CMPO. This plan for Calcutta demonstrated the possibility of preparing a series of programme plans as opposed to a comprehensive land use plan as was envisaged by the planners of Delhi. This Plan and subsequent creation of Calcutta Metropolitan Development Authority (CMDA) to implement the Plan, stand out as important events in the evolution of urban planning in the eastern part of the country.

The Master Plan for Bombay City was published in 1967 and in the same year Bombay Metropolitan Regional Planning Board was constituted. This broadly delineated the Bombay Metropolitan Region and formulated a Regional Plan in 1970.

Housing and Urban Development Corporation (HUDCO) was set up as a financing agency for housing and urban development in 1970. Another landmark was the creation of City and Industrial Development Corporation (CIDCO) for planning of New Bombay—a unique concept based on high technology and futuristic concepts. CIDCO published the Draft Development Plan for New Bombay in 1973.

The Fifth Five Year Plan (1974—79) laid down the twin objectives of removal of poverty and attainment of self-reliance. It laid stress on developmental programme for weaker sections in general and small and marginal farmers in particular. National programme of minimum needs was formulated as part of this Plan. Environmental improvement programmes for slums got special emphasis during this period.

At this stage it was felt that in order to regulate various developmental activities envisaged under various five year plans and to give them future orientations, it is imperative to have clearly defined national urbanisation policy, national human settlements policy and national population policy.

The Fourth and Fifth Five Year Plans identified new sets of urban situations and problems due to the typical urbanisation pattern, favouring advantageous regions and cities. The period is signified by the creation of urban development authorities and special area development authorities, special function authorities, etc.

During the Fifth Plan a special Task Force was appointed to study the prospects developing small and medium size towns in India (1975). On the basis of the Task Force Report (1977) Government of India started a programme known as Integrated Development of Small and Medium Sized Towns (IDSMT) during the Sixth Plan. The Housing and Urban Development Corporation and a large number of housing boards were instituted with the specific aim of financing and development of houses and the related infrastructure. Five additional schools of urban planning were started at regional level to meet the demand of planners.

The awareness of deteriorating environment, depletion of non-renewable resources and the increasing migration to metro cities became a focus of urban planning during the Sixth Plan period 1980–85. Several environmental pollution control Acts and guidelines were formulated at the Centre and state level. Greater use of solar energy and bio-energy received the attention of planners in the evolution of settlement patterns. Energy conservation in designing of urban areas obtained an important place in planning. The centrally sponsored programme of integrated development of small and medium towns was introduced with the objective to check rural-urban migration. Planning education started changing its direction towards new emerging issues and specialisation.

The Seventh Five Year Plan (1985—90) realised that the urban problems have been increasing inspite of all efforts in the past. In the light of new demands of the twenty first century which is expected to be fully based on technology and rationalisation, it is felt that a critical review should be made for which the National Commission on Urbanisation in the Ministry of Urban Development is constituted. The Commission is to identify the critical sensitive elements in urban planning, which need to be implemented in a radical way to satisfy the new demand. The Seventh Five Year Plan has continued with the IDSMT programme alongwith modernisation of existing urban institutions, and has set up a national financial bank for urban development.

3.6 Evolutionary Bench-Marks in Urban Planning in States/Union Territories

The typical states where urban planning started in the initial phase are selected for detailed description. Such states are identified as Karnataka, Uttar Pradesh and Assam. Their evolutionary bench marks are given separately. In addition, the bench marks of urban planning in other states are given in brief.

3.6.1 Karnataka

The state of Karnataka has experienced high level of urbanisation in the past. It was 16.94, 22.95, 22.3

and 24.3 and 28.89 per cent in 1941, 1951, 1961, 1971 and 1981 respectively. The total number of urban centres in the state has increased from 119 in 1901 to 281 in 1981 with the intermediate decadal number as 181 in 1911, 197 in 1921, 215 in 1931, 212 in 1941, 289 in 1951, 231 in 1961 and 245 in 1971.

Karnataka is one of the pioneer states in the field of town planning in the country. The 'City of Mysore Improvement Act' of 1903 was the first of its kind in the country enacted for the purpose of town planning and development. This was followed by the "City of Bangalore Improvement Act 1945". The town planning functions in other towns were looked after by the concerned municipalities under the direct supervision of the state. Separate town planning department in the state came into existence in November, 1959.

Before the state re-organisation, town planning work was being looked after by the concerned Directors of Town Planning in Bombay-Karnataka, Hyderabad-Karnataka, and Madras-Karnataka areas, where Town Planning Act was not in force. The work had been entrusted to a Town Planning Officer. Karnataka has been doing leading job in town planning in the past. Even during the regime of Maharaja well-defined steps had been taken for planned development and beautification of cities. A large number of attractive cities and towns built in past still bring out several good principles of town planning.

Though a separate department of town planning was established in the mid of Second Five Year Plan (November 1959) but the expansion took place during and after Third Five Year Plan as a part of the central assistance scheme for preparing master plans for rapidly growing urban centres. Nine branch offices were started during Third Five Year Plan and another nine Planning Units during the Fourth and Fifth Five Year Plan periods. Today, the Town Planning Department has its branch offices located in all the 19 districts of the state. The function of the Department of Town Planning has been defined as to achieve organised and co-ordinated development at all levels, i.e. regions, urban and rural centres. The main activities of the Department are identified to be :

- Preparation of development plans for metropolitan and river valley regions;
- Preparation of master plans for urban centres, planning for new towns, two expansion schemes, rehabilitation schemes for villages/slum improvement clearance schemes,

- Traffic and transportation designs;
- Technical assistance to the implementing agencies, such as local bodies, city improvement boards, housing boards and other development agencies like Karnataka Urban Development Corporation, Industrial Area Development Board, Mysore Power Corporation, the agricultural produce market committees, regulated market Committees and also to slum clearance board and others.
- Also deals with the matters relating to the Karnataka Town and Country Planning, Act; and
- Assist the authorities constituted under the Town and Country Planning Act and other relevant Acts in force.

Other activities of the Department include the following :

- (i) State Town Planning Board, Karnataka Water Board, Karnataka Slum Clearance Board, Committee for Preservation of Central Administrative Area, Committee for the Preservation of Open Space in Bangalore and Mysore City, Committee for the Preservation of Ancient Monuments, State level Road Safety Committee, Committee constituted by the Government of India for finalising Manuals and Guides, Works Committee of the Bangalore University, the Institute of Development Studies, Mysore University, Bangalore Urban Art Commission, State Committee for Environmental Protection and Planning, Bangalore Development Authority, and City Improvement Boards.
- (ii) Taluka headquarters and Town Surveys : Two units at Bangalore and another at Bellary were created to prepare updated base maps;
- (iii) Rehabilitation Programme for villages : Up-to 1976 about 1000 villages affected by various projects (like water spread of Tungabhadra drainage, Upper Karzha, Ghataprabha, Hemavathi and Mangalore Harbour projects) are planned for rehabilitation. Plans are also prepared for Tibati Refugee Camp at Mundgod in North Kanara District.
- (iv) Traffic and Transportation Studies : The Types of studies being carried out include Interim Report on Traffic and Transportation in Bangalore, Travel Time, study of

road interactions, parking and terminal study. Traffic regulations, study on staggering of work hours, urban travel characteristics, traffic control devices, education and enforcement measures, studies on cycle and pedestrian traffic, transportation and cost-benefit studies, passenger transportation by BTS and trip analysis and transportation planning. A traffic cell has been set up in Department since 1975:

- (v) *Training planners* : The Department is conducting short-term courses for imparting essential and changing knowledge and skill in the field of town planning to the in-service officials of the Department and local bodies;
- (vi) *Programmes of Five Year Plans* : The planning programmes of five year plans are also carried out by the Department. For example, the Fifth Five Year Plan emphasized urban development programmes whereas the earlier plans emphasis was mainly on plan preparation. Importance has been given to the following aspects :
 - District Planning
 - Regional Planning and Development;
 - Integrated Urban Development (Centrally sponsored scheme)
 - Traffic and Transportation;
 - Architectural control and beautification of cities.

Realising the importance of balanced development of the state on regional/sub-regional basis, regional plans were prepared for Bangalore Metropolitan Region, Dundli Resource Regions, Tungabhadra Agro-Industrial Region, Cauvery Valley Region, and Krishna Valley Region.

These regional plans were to cover the whole state and to translate the state's economic plan into physical plan. Other activities of the Department included :

- Integrated Urban Development Programmes (IUDP) to implement plans with the incentive from Central government;
- Design group in the office of the Director of Town Planning to work out beautification and architectural control programmes for Bangalore and Mysore;
- Emphasis during National Emergency was on schemes relating to social justice and benefits to the economically weaker section of the society. Under 20-point programme, direction was given for socialisation of

urban land, prevention of speculation of urban land, sites to landless, slum improvement schemes. The Department is helping the competent authority to prepare lists of urban land, urbanisable land, etc. related matters and proper utilisation of the surplus land for the benefit to community under Urban Land (Ceiling and Regulation) Act, 1976.

- (vii) *Public participation* : Making people more involved in planning through displays and inviting suggestion on specific development plans and schemes.

The staff position in the Department of Town and Country Planning has grown manifold as it was about 15 in 1959 as compared to more than 500 in 1987 (Figure 3.11).

The important landmarks of urban planning in Karnataka are identified as below :

- 1959 — Separate Town Planning Department came into existence on 3rd November with a skeleton staff under the ex-officio Director of Town Planning.
- 1960 — The First Conference of State Minister for Town and Country Planning was held at Bangalore in 1960. The Model Town and Country Planning was held at Bangalore in 1960. The Model Town and Country Planning Act sent by the Government of India reviewed and draft Mysore Town and Country Bill was finalised.
- 1961 — Additional staff was sanctioned for the central office of the Department. The Mysore Town and Country Planning Act was passed by the Mysore Legislature. Five Master Plan units were started and the Bangalore Metropolitan Planning Board was constituted.
- 1962 — Draft Master Plan for Bangalore Metropolitan Planning Area was finalised.
- 1963 — The Mysore Town and Country Planning Act received the assent of the President of India. Comprehensive traffic and transportation studies of Bangalore Metropolitan Region were started.
- 1965 — The Mysore Town and Country Planning Act came into force. The state Town Planning Board was constituted and the post of full time Director of Town Planning was created.
- 1966 — Planning authorities for four major urban areas were constituted.

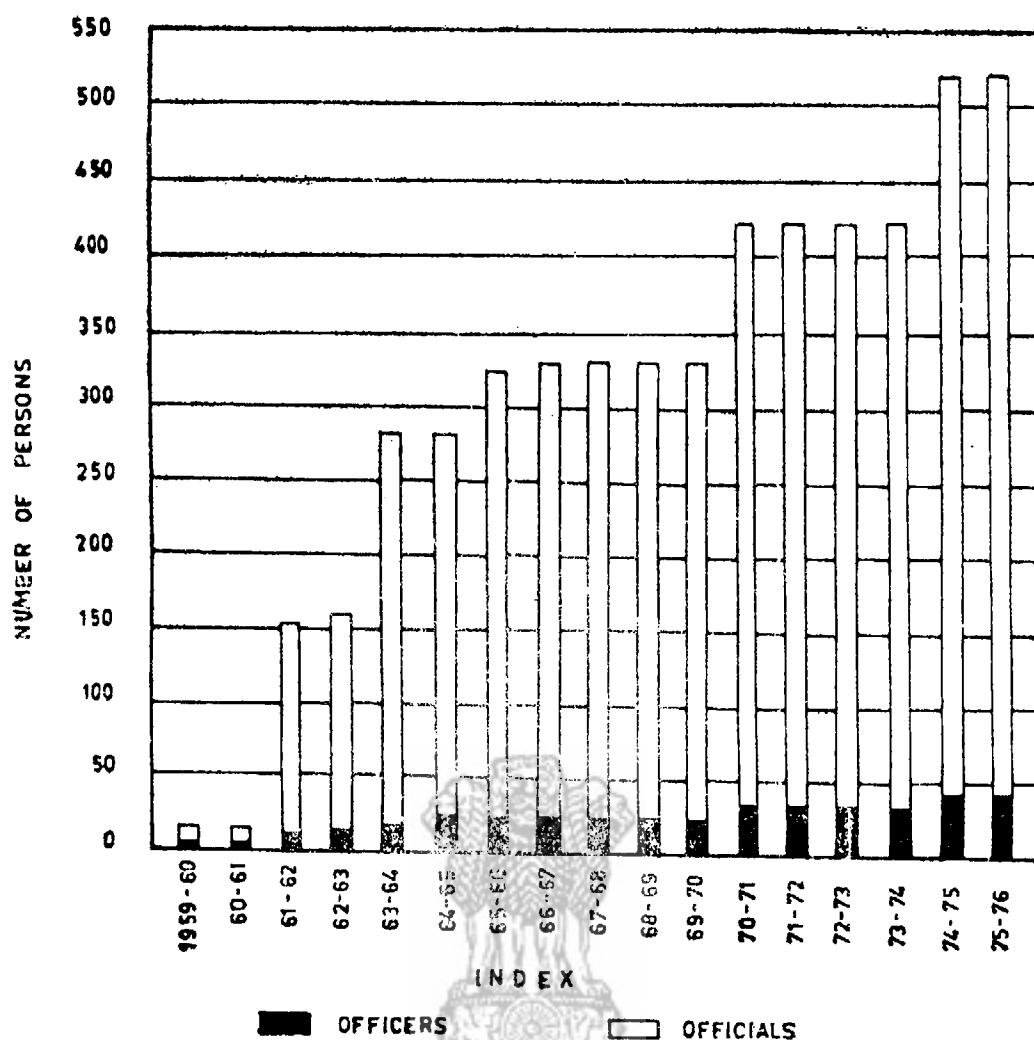


Fig. 3.11 Growth of Planning Staff in Karnataka

- 1968 — The short-term training course in town planning for in-service personnel was started.
- 1970 — The Department of Town Planning was made permanent.
- 1975 — A traffic cell in the Department of Town Planning was created.
- 1976 — Merging the city planning authority of Bangalore with the Bangalore Development Authority, with full-time planner. The Bangalore Urban Arts Commission was constituted. A design group was created in the office of the Director of Town Planning to assist the Urban Arts Commission. A state level committee for environmental protection and planning was constituted having the Chief Minister, as Chairman and the Director of Town Planning, as Member Convenor.
- 1982 — The detailed rules under the Bangalore Development Authority Act of 1976 were finalised for implementation.

1985 — The Bangalore Metropolitan Regional Development Authority Act was enacted and the Bangalore Metropolitan Regional Development Authority was created.

3.6.2 Uttar Pradesh

Uttar Pradesh is the most populous state in the country, having 110.862 million population (1981) inhabited over an area of 294,413 sq. km. The share of urban population in 1981 was 17.9% increasing with a decennial growth of 25.5% in 1971-81. Approximately one third of the urban population of the state is concentrated in the five large cities known as KAVAI, i.e. Kanpur, Agra, Varanasi, Allahabad and Lucknow. Two thirds of urban population is accommodated in the cities and towns distributed throughout the state. The most distinguishing feature of current urban problem is its absolute size and intensity in a limited area. According to the population projections by the Registrar General of India, total population and its urban constituent in the state is likely to be 153 million and 32.2 million (21.08) respectively by 2001. According to another study

by Town and Country Planning Organisation, Government of India, where assumption was proper relation between economic development and urbanisation, it is projected that Uttar Pradesh should have urbanisation level of 39.7%. The implications of the two projected figures is that more small and medium towns should be developed to strengthen the economy and a proper system of hierarchy of settlements. The earliest known attempt in the field of Town and Country Planning in Uttar Pradesh was made in Lucknow when Sir Patrick Geddes was invited in 1915 by Lucknow Municipal Board to give advice on some of their town planning schemes. This resulted in setting up of an 'Improvement Committee' in 1918 to formulate proposals for the development of the city of Lucknow. This Committee, under the technical guidance of an eminent town planner Mr. H. V. Lancaster, submitted its report in 1919 covering almost all aspects of civic improvement which was another landmark in the history of modern town planning in Uttar Pradesh.

This report laid the foundation for comprehensive town planning in the state, having resulted in the enactment of Uttar Provinces Planning Act, 1919 and creation of improvement trusts in its three large cities, namely Lucknow, Kanpur and Allahabad. World War II gave stupendous thrust to Kanpur's industrial products, doubling its population during 1931-41. To meet the special town planning problems confronting Kanpur, a broad-based Kanpur Development Board was created in 1946 (with the enactment of Uttar Pradesh, Kanpur Urban Area Development Act, 1945). Two more improvement trusts, one at Agra and the other at Varanasi, were created thereafter.

In the post-independence period when attention of Government was directed towards rapid economic development programmes such as large scale industrialisation, highway construction, rural development, a town planning wing in 1943 was created in the Central Planning Office under the Rural Development Department functioning under a Town and Village Planner. The wing planned for rehabilitation of flooded villages and refugees from Pakistan. Planning office was separated from the Central Planning Office and was placed under the administrative control of Municipal Department in 1949. The next year it was converted into an independent department of the Government. The initial functions included advising local bodies on specific planning problems like housing for resettlement of displaced persons, improved layout plans and housing schemes for areas devastated by floods, fires, etc. Architecture wing was added in the town planning department.

Upto 1958, the Department carried out its functions mainly through executive orders of the Government

which were not enough for implementation of town planning schemes. The Government enacted Uttar Pradesh Regulation of Building Operations Act in 1958 which gave wide powers to control and guide the development of any area declared as Regulated Area under the Act. There is one controlling authority for each regulated area which have grown from 15 in 1961 to 63 in 1987.

The Government enacted Urban Planning and Development Act in 1973 with a view to creating Development Authorities for the implementation of master plans. The Chief Town and Village Planner or his representative is a technical member of eleven Development Authorities created so far under this Act. In 1976, Central Urban Land (Ceiling and Regulation) Act was enacted and made operative in 12 cities of the state.

With the objective of having planned development of urban areas on a continuous basis, the Town and Country Planning Department was declared permanent in the year 1960. During the Third Five Year Plan, in the year 1962, the work of preparation of master plans and regional plans under the Centrally sponsored scheme known as Regional Planning Scheme was entrusted to the Department and since then its functions have been increasing year after year. Under the Third Five Year Plan following eight projects were taken up and nine Divisions of the Department were established for the purposes in 1962.

Master Plans :

- (i) Lucknow
- (ii) Kanpur
- (iii) Varanasi
- (iv) Allahabad.

Regional Plans :

- (v) Rihand Region
- (vi) Hardwar-Rishikesh
- (vii) Dehradun Region
- (viii) Gorakhpur-Deoria Region
- (ix) Meerut-Bulandshahr Region

Physical Surveys :

Preparation of base maps of towns and cities for the master plans and regional plans.

Subsequently, the three Annual Plans (1966-69) recommended regional approach to the problem of urban development. With effect from April, 1969 regional planning scheme was transferred to the state sector.

During the Fourth Five Year Plan (1969-74) preparation of master plans for fast growing cities like

Bareilly, Moradabad, Agra, Mathura, Jaunpur and Gorakhpur as well as preparation of regional plans for selected regions of the state like Banda-Hamirpur Region, Rae Bareilly Region and traffic and transportation plan of Kanpur Metropolis was taken up in addition to continuing schemes of Third Plan. Environmental improvement of slum areas, implementation of social housing schemes and urban development schemes within the framework of master plan of the city concerned were some of the major projects taken up during the Fourth Plan by the Department.

During the Fifth Five Year Plan (1974-78) the functions of Town and Country Planning Department were further enlarged to include the following :

- (i) Preparation of regional plans for the entire state;
- (ii) Preparation of master plans for fast growing urban centres on a more comprehensive and regional basis;
- (iii) To promote development of small and medium towns to ease the pressure of increasing urbanisation of KAVAI cities; and
- (iv) To assist the implementation of integrated urban development projects of national importance such as those related to metropolitan and other major and important urban centres.

During 1974-78 the Department completed master plans for six cities of immediate importance, in addition to preparing two Regional Plans for Meerut-Bulandshahr Region and Rae Bareilly District.

In the past, the major objective appears to have been to give greater emphasis on planning of cities. Adequate attention has not been paid to the formulation of policy for arresting the growth of large cities. It is now imperative that immediate effective steps may be initiated and vigorously implemented to channelise the anticipated future urban growth to medium and small towns and cities so as to maximise the overall benefits of the economic development policy. Emphasis is given on the following measures :

- (i) Preparation of Integrated Regional Development Plans for balanced special development of urban and rural areas in their continuum and in terms of identification of growth centres, growth poles and new towns in the regions of large cities, special development authorities, industrial development authorities, and the municipalities/controlling authorities.

(ii) In addition, the Department of Town and Village Planning has been doing the following works —

- (a) Preparation of redevelopment plan of a typical civil lines area as (Allahabad) as model for others;
- (b) Development planning for New Tehri township;
- (c) Planning for medical and health services in selected districts as demonstration projects under the guidance of the World Bank, and the Ministry of Health;
- (d) Project formulation and monitoring of World Bank projects in the state, particularly in the Kanpur Urban Development Authority area;
- (e) Organisation of seminars and exhibitions periodically to evoke public participation;
- (f) Traffic and transportation studies and plans through a specific cell on the subject in the Department.
- (g) Providing technical guidance for housing schemes being executed through housing boards, development authorities and local bodies;
- (h) Planning and help in development of various schemes under the programme of IDSMT.
- (i) Planning and development of medium and small size towns and cities within the framework of regional plans with a view to siphoning off excess growth of large cities and arresting their growth. There is a need to make systematic planning and development of small and medium size towns as a pre-requisite to modernization of agriculture and rural areas and dispersal of industries so that the problems of excessive migration to the large cities can be kept in check; and
- (j) With increasing stress on employment oriented planning strategy, greater emphasis needs to be laid on spatial dispersal of employment generating activities. Therefore, there is a need to integrate economic planning and human settlement planning.

In the light of this strategy of urban planning and development and the focus indicated in the Sixth Five Year Plan and the Seventh Five Year Plan, the Department has restructured its activities. For example, comprehensive regional planning work is carried out, planning for minimising the regional disparity is attempted and the planning and development of small and medium towns is taken up.

By 1987 more than 10 national plans, more than 5 districts plans, 100 master plans and more than 200 village plans have been prepared by the Department. The master plans are being implemented by development authorities numbering 20, located in various parts of the state.

Based on the information received in questionnaires from the town planning organisations, urban development authorities and other urban planning related agencies, the bench marks in urban planning and their associated fields are detailed out in Table 3.1. They are related with enactment of legislation, preparation of plans, and establishment of agency or special purpose cells. The bulk of bench-marks have taken place in seventies and eighties.

3.6.3 Assam

Assam has an area of 79 thousand sq. km. and in 1981 it had a population of 19.897 million. Its decennial growth rate in the period 1971-81 was 36.1* percent and urban population in the state was estimated at 10.3* per cent. The state thus has a rural base.

Urban and Regional Planning in the state is governed by the Assam Town and Country Planning Act, 1959. This Act gives full powers of statutory plan-making and the preparation of development schemes, and in 1964 it was amended to enable the constitution of development authorities. Five such authorities were set-up, but for all purposes there are at present defunct. Primarily, the Act is weak in the implementation aspects and also to some extent in the statutory plan-making process.

A Town and Country Planning Organisation was established in Assam in 1955. Besides preparing the master plans, the TCPO was engaged in preparing urban development schemes for various municipal committees and town committees, which depended on Town and Country Planning Department of the State Government for necessary grants. This activity of preparation of town planning schemes for municipal lands in various towns is still continuing. This only

change that has come in their recent years, is that many schemes are supervised and implemented by an executive engineer who is a part of TCPO, Guwahati. Guwahati Master Plan was published in 1965 and Tinsukhia Master Plan in 1967.

In 1965, four new branch offices of Town and Country Planning Organisation were started at Dibrugarh, Silchar, Jorhat, and Tejpur for preparation of master plans for these towns. In the meanwhile, Assam Slum Areas (Improvement and Clearance) Act 1959 (Act 12 of 1961) came into being. Another Bill on periphery control was introduced but it never became an Act.

One of the major lacuna of the Town and Country Planning Act of Assam is that it is not applicable to the areas where Hill District Councils are in operation. This has acted as a major setback in implementing even the Master Plan of Guwahati, as Chairman of Hill District Councils falling within the Master Plan area never accepted the Act.

The Town and Country Planning Organisation is principally a body plan preparation, the implementation being done by various Government departments, authorities and local bodies. As per the Assam Town and Country Planning Act, after the adoption of final Master Plan by Government an authority has to be constituted by the Government for plan implementation. The basic functions of these authorities are to promote and secure development of concerned town according to the adopted master plan.

Apart from the preparation of master plan the Government has entrusted the Town and Country Planning Organisation with various other activities, such as monitoring and evaluation of urban development schemes, co-ordination and implementation of projects under Integrated Development of Small and Medium Towns (IDSMT), preparation of schemes for improvement of urban slums and monitoring and evaluation of the same, preparation of various development schemes for local bodies and government departments and any other function entrusted by government from time to time.

The Town and Country Planning Organisation is headed by the Town Planner with headquarters at Guwahati. There are district level offices in 11 districts out of the 18 districts in the state. There is proposal for creation of three more district offices. Besides this, there are two drainage and sewerage divisions at Guwahati and Tinsukhia under Executive

*Source: Statistical Outline of India, 1986-87, Tata Services Limited, Department of Economics and Statistics.

Engineer. The district level offices are headed by Associate Planner in nine offices and by Assistant Town Planner in two offices.

The Town Planner as head of the Organisation is in overall charge of all physical planning matters and is directly responsible to the Government. The Secretary to the Government of Assam, Town and Country Planning Department remains in control of overall administration.

So far the Town and Country Planning Organisation, Government of Assam has prepared the final Master Plans for nine different towns and preparation of two are in final stages. The Master Plan for Guwahati has been recently modified and that of Tinsukhia is under modification. Besides this, master plans for six more towns of the State are under various stages of preparation. In addition, to the above five towns were taken up during the Sixth Five Year Plan under the Integrated Development of Small and Medium Towns (IDSMT) programme. These schemes are being implemented through P.W.D. and respective Municipal Boards, except for the scheme of Residential Land Development which is being implemented by the Organisation directly and by Development Authorities, wherever in existence.

For Environmental Improvement of Slums, so far 18 towns have been provided with funds for implementation of schemes in slum pockets. The scheme includes provisions of water supply and sanitation, brick pavements and drains, street lighting, etc. for the slum dwellers.

3.6.4 Andhra Pradesh

Andhra Pradesh has an area of 2.77 lakh sq. km. and in 1981 it had a population of 53.55 million of which 12.447 million were in urban areas. Its decennial growth rate in the period 1971-81 was 23.1 percent and it has 224 urban settlements in 1971, of which 11 had a population of more than 0.1 million including the metropolitan area of Hyderabad.

Urban and regional planning in the State is governed through the Andhra Pradesh (Andhra Area) Town Planning Act, 1970 and planning clauses from the Hyderabad District Municipal Act, 1955 which are

confined to the municipal areas of Telengana. These acts do not bestow full powers for planning activities in the State and comprehensive legislation is under the consideration of the State Government so as to incorporate the statutory plan-making process, planning control and development at the regional, urban and action area levels. In the meanwhile, the Andhra Pradesh Urban Area (Development) Act, 1975 was passed which is a powerful planning and development Act, to be extended to urban areas with high potential development in the State and in supersession of existing legislation. It provides for the creation of apex planning and development authorities. Such authorities have been created for Hyderabad, Vishakapatnam and Vijayawada. There is no proposal at present for the creation of more of such authorities.

At the State level a well-organised Directorate of Town Planning exists. At present there are 17 sanctioned posts for qualified planners comprising of one Director; One Senior Joint Director; Four Joint Directors; and eleven Assistant Directors. The entire staff functions from the capital of Hyderabad but are responsible for plan-making all over the state. As of date, the Department has prepared 25 development plans of which 10 are statutory in nature inclusive of plans for Hyderabad, Vishakapatnam and Vijayawada which are now being revised for a larger metropolitan area on a regional basis by the Urban Development Authorities with the help of the State Planning Department. The Department is being consulted on all important development issues in the State and is widely recognised through the various committees on all issues relating to physical planning and socio-economic growth in the State.

Andhra Pradesh has a remarkable experience in 'Urban Community Development Programme'*. It is carried out in Hyderabad with the support of United Nations Children Fund. The activities of this project included :—

- (i) Environmental sanitation, water and other physical improvements;
- (ii) Family welfare activities : (a) Immunisation; (b) health and first-aid classes; (c) cooking demonstration; (d) family welfare

*Beginning in 1958, with the Delhi Pilot Project financed by the Ford Foundation, there have been a series of Urban Community Development Projects in India. The Delhi project was followed in 1962 by the short-level Ahmedabad project which was also funded by the Ford Foundation. The 3rd project was sponsored by the American Friends Service Committee in Baroda in 1965 and continues today under the Baroda Citizen council. These pilot projects supported by non-governmental agencies were followed in late 1966 by a series of 14 pilot projects throughout the country sponsored originally by the Central Government through the then Ministry of Health, Family Planning and Urban Development. Some of these continued upto late 70's. Philosophy of these projects had been 'self-help' making it people's project. The community organisers had very key role for the success of the project as they had to stimulate, guide, and sustain the whole process.

- meetings; (e) comprehensive medical check-up schemes; (f) eye-camps; and (g) family planning work.
- (iii) Supplementary feeding programme; (a) special nutrition programme; (b) Mid-day meals programme.
 - (iv) Recreational and cultural activities and health programmes.
 - (v) Educational activities; (a) Balwadi and primary schools; (b) Night classes; (c) Vocational training—sewing classes, other vocational course as typing, shorthand, auto-rickshaw driving, motor-driving, photography, radio repairs, air conditioning and refrigeration; and (d) Non-formal education study tours, other activities e.g. community dinners, exhibitions and dramas, libraries and reading rooms.
 - (vi) Economic activities; (a) bank loans; (b) serving production centres; and (c) co-operatives.
 - (vii) Construction of community halls and housing improvements.

The lesson of the project for its application elsewhere are :—

- (i) It demonstrates that the classical community development approach to the problems of the urban poor can be effective both in providing improved social services cheaply and also for meeting the basic problems of poverty.
- (ii) It also shows that despite the central problem of poverty, there are enormous potential economic resources in most slum communities which can be actualised with the help of sensitive community workers.
- (iii) It shows that one key to success in C.D. is the staff and its approach. In fact the selection and training of staff is probably the most important element in any community development programme.
- (iv) It demonstrates the importance of the effective co-ordination and use of both internal and external resources;
- (v) It also demonstrates the importance of certain basic linkages in the development process which include :—
 - (a) Integration of physical improvements within the community development process;
 - (b) Systematic linkages of voluntary organisation with slum communities.

- (c) Systematic linking of slum residents with financial institutions in the formal sector of urban economy.

3.6.5 Bihar

Bihar which is the second largest state of the country in terms of size of population, has a population of 69.9 million and an area of 1,73,876 sq. km. About 87.5 per cent of this population of the state live in more than half a lakh rural settlement (67,566) and the rest of the 12.5 per cent in 202 urban settlements in 1981. Agriculture, or the primary sector activity, is the dominant occupation of the State.

Town and Country Planning in the State had its origin from the Bihar Restriction of the Uses of Land Act, 1948, which provided the statutory background for development; later, it was strengthened by the Bihar Town Planning and Improvement Trust Act, 1951, and Bihar Regional Development Authority Ordinance, 1975. State Town and Country Planning Department is primarily engaged in preparation of master plans, regional plans, and rendering advice in respect of industrial development activities in the State. The Damodar Valley regional planning by DVC and regional plan for the steel-coal belt as part of the South East Resource Region Plan are the highlights of the town and country planning activities in the State. Master plans for 20 cities and towns, five regional plans, and a perspective plan for the capital city of Patna, have been prepared. Development of agricultural markets in rural and their spatial location has also been taken up along with the development of network system through World Bank assistance schemes.

The setting up of a State Regional and Town Planning Board is being contemplated to help facilitate translating the state development plan into concrete area development programmes. The State is likely to be delineated into seven planning regions mainly for agricultural and industrial development purposes and to co-ordinate their planned development through a settlement structure and a comprehensive legislative backing such as the Bihar State Regional and Town Planning Act.

To improve the living conditions in the human settlements in the State, three sets of building bye-laws and planning standards have been prepared to effectuate planned development and infrastructure facilities and augment the present capacities to a predetermined scale.

3.6.6 Gujarat

Gujarat has an area of 1.96 lakh sq. km. and in 1981, and had a population of 34.086 million in

1981. Its decennial growth rate in the period 1971-81 was 27.7 percent and it had 31.1 percent of its population living in urban areas in 1981.

Gujarat is a highly urbanised State and the towns and cities are overgrowing their limits. Therefore, it became necessary to have a suitable Act to be able to plan and control the development both within and outside the municipal limits. The Government, therefore, enacted Gujarat Town Planning and Urban Development Act, 1976. Government is also contemplating to establish urban development authorities in areas where planning problems are more complicated and acute.

The State Town Planning and Valuation Department, like the Town Planning Act, is also one of the oldest in the country. It carries out its activity through five divisional offices located in different parts of the State. The Department is adequately staffed and has competent planners to deal with various types of planning problems.

With a view to achieving balanced growth in all parts of the State, it has been the policy of the State Government to prepare regional plans and to identify growth centres. For the present a Regional Plan is under preparation for Ahmedabad-Vadodara-Surat Planning Region, which is one of the highly urbanised part of the country. Development plans for all the municipal towns in the State have been prepared and are in operation. In addition, over 100 town planning schemes have been prepared in conformity with the master plans for implementation.

With a rapid growth of urbanisation, the traffic problems in the metropolitan city of Ahmedabad have become more acute. The Town Planning Department has therefore, taken up the preparation of Traffic and Transportation Plan for Ahmedabad, and traffic plans for other cities are contemplated in stages.

3.6.7 Haryana

Haryana has an area of only 0.44 lakh sq. km. and in 1981, it had a population of 12.923 million of which 2.83 million were urban. Its decennial growth rate in the period 1971-81 has been 28.8 per cent with a fairly balanced urban-rural pattern.

The State is within the influence region of Delhi but at present without a comprehensive town planning and development law. Planning activities in the State are governed through several acts, the most important being the Punjab Periphery Development Control Act, 1953, the Punjab Municipal Act, 1911, the Punjab Town Improvement Act, 1922 and the Haryana Urban Authority Act, 1977 which has superseded the Punjab Urban Estates (Development and Regulation) Act,

1964. These laws do provide for the enforcement of planning regulations but co-ordination is achieved only at the State government level.

At present the State has a Director of Town Planning who is an administrator. He is assisted by a number of technical persons headed by Chief Town Planner who functions through various regional offices helped by senior planners, associate planners and junior planners. With the help of this technical staff, the Department has prepared more than 25 development plans but none of these are yet statutory in nature due to the lack of comprehensive legislation. Once a comprehensive legislation is introduced in the State, a series of statutory plans would be available through regional frameworks and a co-ordinated development and implementation process. The State Planning Department plays an active role in the co-ordination committees of the National Capital Region, the draft plan for which covers practically the entire State of Haryana and this plan governs a lot of planning activities in the State. The Department is consulted on all important planning and development issues in the State and also prepares action area schemes for the State Development Authority, improvement trusts and other departments.

3.6.8 Himachal Pradesh

Himachal Pradesh is located in the north west of the country surrounded by hill ranges and valleys with a population of 4.20 million and area of 56,673 sq. km. in 1981. Its decennial growth rate in the period 1971-81 was 23.7 percent with 7.6 percent of its population living in urban areas. Agriculture and horticulture are the mainstay of Himachal Pradesh's economy as majority of its people are engaged in these pursuits. The town and country planning activities of the state have been mainly geared to development plans of growth centres, urban-settlements and conservation of areas of scenic interest, development of tourist resorts, preservation of social and cultural aspects of development without disturbing the natural settings.

The Town and Country Planning Department which made a small beginning in 1964 as part of the Public Works Department has come in a big way with a directorate of its own in 1977. The Himachal Pradesh Town and Country Planning Act, 1977, has been enacted recently, providing a comprehensive legislative backing for developing the various settlements in the State, and for regional development with special emphasis on tourism and infrastructural facilities. The development plan for the capital city of Simla has been taken up for implementation, and a Town and Country Development Authority has been set up to

effectuate the developments. Special Area Development Authorities are also being contemplated to develop such areas which have a special focus or features for tourism development like Manali, Kulu valley and other scenic spots in the State. Development of cluster of villages, as part of development of special growth centres for human settlements, has also been taken up mainly to regulate their growth and development, but also to strengthen the available infrastructural facilities in these areas to provide a comprehensive overall development strategy for their growth and livability.

3.6.9 Jammu & Kashmir

The State of Jammu & Kashmir covers an area of 0.223 million sq. km. and in 1981 had a population of 5.987 million of whom 1.263 million were urban. Its decennial growth rate in 1971—81 was 29.7 per cent. The state comprises of two parts—namely Jammu in the plains and Kashmir in the Himalayas.

Town planning activities in the State are controlled through the Jammu & Kashmir Town Planning Act, 1963. This Act provides for comprehensive planning but is weak in implementation, though amendments were made to the Act to provide for development authorities at Srinagar and Jammu. These authorities are slowly picking up momentum in planning and development activities.

No regional planning activities have yet been undertaken but it is hoped that once the comprehensive planning and development law is available for the State, regional, urban and action area plans will be prepared with full implementing arrangements, as these co-ordinated activities are badly required for a State which caters for a large floating population due to its tourist significance. Generally, the Department is consulted on all the physical planning issues.

3.6.10 Kerala

Kerala has an area of 39,000 sq. km. and its population was 25.454 million in 1981. Its decennial growth rate in the period 1971-81 was 19.2 percent; 18.7 per cent of its population lived in urban area in 1981.

Kerala State has the highest density of population of 653 persons per sq. km. in the country, highest rate of literacy of 70.4 per cent and also unemployment of a very high degree in 1981. Its settlements consist of scattered homesteads whether in urban or rural areas, making it difficult to demarcate the urban and rural areas of the state. The urban areas in Kerala comprise of three city corporations, thirty three municipal towns, one cantonment, one township and fifty non-municipal towns.

Urban and regional planning in the State was started in a small way when the Department of Town Planning was established in 1957. Since then, development plans for the three major urban regions of the State, all the district headquarters towns, five other municipal towns and three special development areas have been completed. For the implementation of the development plans for the three major urban regions, Town Planning Trusts were created. Of these, the Cochin Town Planning Trust was later replaced by the Greater Cochin Development Authority in 1976. Development plans for other areas are being implemented by the concerned local bodies. These agencies as well as other developmental agencies like the State Housing Board, departments of Government, etc. avail of the Plan'. Preparation of development plans is also of planning and developmental activities.

It is now proposed to identify the State as a single planning region and to prepare a 'State Development Plan'. Preparation of development plans is also contemplated.

A comprehensive Town and Country Planning Bill, is now before the State legislature, incorporating inter alia a 'Town and Country Planning Board' at the State level and Planning and Development Authorities at the local level, for effective control and co-ordination of developmental activities in the State.

3.6.11 Madhya Pradesh

Madhya Pradesh is the largest State in India occupying an area of 0.443 million sq. km. However, population-wise it is smaller than Uttar Pradesh, Bihar, Maharashtra, and Andhra Pradesh with a population of 521.79 lakhs in 1981, of which only 105.92 lakhs were urban. Its decennial growth rate in the period 1971—81 was 25.3 per cent.

The State occupies a central position in India and has at present a well-established Town and Country Planning Directorate which covers the entire State in physical planning activities through a series of regional offices.

A comprehensive planning act titled Madhya Pradesh Town and Country Planning Act, 1973, is in force in the State. It is a comprehensive planning and development act and provides for the preparation of regional plans, urban areas plans and zonal plans and prescribes controls for development and use of land. It also envisages preparation of town development schemes by the development authorities which can be constituted under the Act. Planning has been centralised under this Act and the State Town Planning Department is the planning authority for all the

planning areas in the State and the Department is to prepare all development plans. The implementation of the plan is to be entrusted to the development authorities within the framework of the plan.

At present under the Act, a number of development plans have been prepared, of which some are statutory in nature. These plans consider regional parameters but as yet there is no regional plan prepared for the state. It is likely that regional planning would emerge in a big way through this well-established Department. The South East Region Plan prepared by the TCPO covers a large portion of the eastern part of the State and this does offer a guidance for a regional framework in that area.

Development authorities are at present set-up for Bhopal, Indore, and Ujjain and they are in the process of being set up in other important urban centres. Also, special areas development authorities have been created for Durg-Bhilai, Korba and Khajuraho. The Department is consulted on physical planning issues and is represented on all committees dealing with land, socio-economic frameworks, etc.

3.6.12 Maharashtra

Maharashtra has an area of 3.08 lakh sq. km. and its population was 62.784 million in 1981, of which 21.974 million is urban. Its decennial growth rate in the period 1971-81 was 24.5 per cent.

Maharashtra State has a long tradition in town planning as it has been one of the most highly urbanised and industrialised States in India. However, the overall picture is misleading to hide wide regional disparities. The Town Planning Department was established in 1914 and the Bombay Town Planning Act, first of its kind in India, was enacted in the very next year (1915). The Town Planning Act currently in force in the State (enacted in 1966) provides for planning at three levels—the regions, the town and the sector. 'Town Development Plans' have to fit in the broad frame of the 'Regional Plans', and 'Town Planning Schemes' are undertaken to implement the Development Plan proposals. The Town Planning schemes are based on two very progressive features viz. (1) Compulsory pooling of all lands for planning irrespective of ownership and subsequent redistribution of reconstituted plots among original owners; and (2) Recovery of betterment contributions from owners of benefited lands.

Planning powers vest in the municipal councils and planning is an 'obligatory' function of the councils. The Town Planning and Valuation Department is, however, mainly responsible for preparation of development plans and town planning schemes prepared

by the Department on agency basis. To date, development plans of almost all municipal towns have been prepared. More than 100 town planning schemes have also been prepared and finalised.

The State has also done important work in the field of regional planning of which the three Regional Plans for the Bombay, Pune, and Nagpur Metropolitan Regions have been finally sanctioned and are under implementation.

The new town development projects are under way viz. New Bombay and Pimpri-Chinchwad for estimated ultimate population of 2 million and 0.5 million respectively. Several area development projects have also been undertaken through the City and Industrial Development Corporation of Maharashtra. The Maharashtra Government provides substantial financial assistance to the municipal councils for the implementation of their development plans.

3.6.13 Meghalaya

Meghalaya which became a full-fledged State in 1971 has about the same area as Manipur, i.e. 23,000 sq. km. with a population of 1,336 millions in 1981, of which 0.241 million were urban. Its decennial growth rate has been 32.0 per cent in the period 1971-81.

The area is largely hilly and the Meghalaya Town and Country Planning Act is to be shortly enforced to supersede the Assam Town and Country Planning Act, 1959 as extended to the State. This would be a comprehensive Town Planning and Development Act with full powers for statutory plan-making at the region, urban and action areas for development controls and for plan implementation. Under the present Act as extended, one Statutory Plan has been prepared in the State, namely for Singhasiri new town but plans are now being prepared for Shillong and other centres. The State has Technical Director for Town Planning. It is likely that in due course with comprehensive planning legislation the staff would be suitably expanded and the plan-making and development process accelerated.

3.6.14 Nagaland

Nagaland which also came into being in 1971 occupies only 17,000 sq. km. on the eastern borders of India. In 1981, it had a population of 0.775 million of which only 0.12 million were urban. Its decennial growth rate in the period 1971-81 has been 50.10 per cent which is one of the highest in India. The bulk of the population, however, is rural. (Only 15.5 per cent of population lives in urban areas).

The Nagaland Town and Country Planning Act, 1966 which is in force in the State and is based on the Assam Town and Country Planning Act, 1959 is the basis for planning activities. This Act is a comprehensive planning Act, but weak in development Activities. The State Government is actively considering to modify the existing Act appropriately.

The State has a Town Planning Department. Planning and redevelopment activities in the State would be accelerated once the Act is modified and statutory plans are available for proper implementation.

3.6.15 Orissa

Orissa has an area of 0.156 million sq. km. and its population was 26.37 million in 1981 of which 3.112 millions were urban. Its decennial growth rate in the period 1971-81 was 20.2 per cent.

The Town Planning Organisation, Orissa was organised in the year 1964. Five field Town Planning Units were also established in the same year to tackle the problems due to fast growth of urbanisation in the wake of the implementation of Five Year Plans. In course of undertaking the town planning projects during the third, fourth and fifth plan periods, a number of master plans for different urban areas numbering about 36, have been prepared by the Directorate of Town Planning.

There are five improvement trusts constituted and located at Cuttack, Bhubaneswar, Berhampur, Sambalpur and Rourkela. The Greater Cuttack Improvement Trust, was constituted in the year 1962 whereas the rest were established in 1976.

The programme of the Department envisages preparation of master plans for sixteen towns, of which eight are in different stages of progress.

In addition, the Directorate of Town Planning collaborated with the University in campus development at Berhampur and Sambalpur. It had earlier assisted the Hindustan Steels Limited at Sunabenda for their township and the Port Trust of Paradip for the port township, apart from the Irrigation Project townships at Upper Kolab and Rengali. It provides technical assistance to various local bodies, improvement trusts and government departments in the planning and development programmes.

3.6.16 Punjab

Punjab is known as the sword arm of India. Out of the total 16.789 million area and population at the national level Punjab area is 1.5 per cent (50,000 sq. km.) and population is 2.45 per cent. Punjab is predominantly agricultural. The total population is 16.75 million out of which 72.3% are living in rural

areas in 1981. Urban component of 4.65 million population lives in more than 100 towns. The State is not only tackling the problem of improving the living conditions of the people but also to plan for the absorption of an additional 10 million persons by 2001, their distribution and to meet the basic services and facilities in all the urban and rural settlements. Punjab has a State level Planning Board for socio-economic planning and town and country planning for physical planning.

The Town and Country Planning Department has prepared physical development plans for selected districts and community development blocks and master plans for the major cities and towns in Punjab. Integrated urban development programmes at a cost of Rs. 2640 million for three major cities of Amritsar, Jullundur, and Ludhiana are under implementation. In addition to the above, a network of 108 mandies (marketing centres for agricultural produce) and Urban Estates at 26 major urban centres are being established. The major projects undertaken include a new town of 0.35 million Sahibzada Ajit Singh Nagar (Mohali) as an extension of Chandigarh, urban redevelopment for approach road to Golden Temple and Jallianwala Bagh at Amritsar.

The State level implementation and development agencies for meeting requirements of sites for residential, commercial, industrial purposes are Housing and Urban Development Department, Local Government Department, Colonization and Land Acquisition Department, Housing Development Board, Small Industries Corporation, Water Supply and Sewerage Board. Improvement trusts, municipal corporations and municipal committees operate at the city/town level for improvement, development, maintenance and up-keep of the municipal services and activities. The Development Department is the apex body for co-ordination and implementation of all activities in the rural sector.

3.6.17 Rajasthan

Rajasthan State encompasses one-tenth of the total land area of India, whereas its population was only one-twentieth in 1981. Rajasthan has an area of 0.342 million sq. km. and its population was 34.262 million in 1981 of which 7.195 million were urban. Its decennial growth rate in the period 1971-81 was 33.0 per cent. The State came into being after Independence by merger of a number of the then princely states. District of Ajmer was made a part of Rajasthan in 1956. More than half of the State territory is arid and desert. This is separated from the eastern and south-eastern relatively fertile lands

by the Aravali hill ranges. The State is divided into 26 administrative districts.

The State Town Planning Organisation was originally a circle office in the Public Works Department. It was established as an independent department on 1st April, 1964 by taking advantage of the central scheme initiated during the Third Five Year Plan for setting up of Town Planning Departments at the State level. The Principal functions of the department are to prepare master plans for various towns and cities in the State, to prepare a Regional Plan for Rajasthan Canal Command Area and other similar developing regions, to advise urban improvement trusts, municipal councils/boards, other local bodies, statutory authorities like Rajasthan Housing Board, State Industrial and Mineral Development Corporation, State Road Transport Corporation and other Government Departments on all matters relating to urban and regional planning. The Department also advises the Government on matters relating to planning administration, planning legislation, housing policy, urban land policy, special architectural projects and matters relating to urbanisation policy and direction. The head office is in Jaipur.

In 1967, the work programme of the Organisation was rationalised and the various projects were given systematic direction. The 26 districts in the State were grouped into 7 'Workable Regions', the smallest being Ajmer, a single district-region and the largest being Jodhpur encompassing 7 districts. Other regional offices are at Alwar, Kota, Udaipur and Bikaner, all class I cities in the State. These regions were delineated on the basis of economic, social, cultural and physical considerations. A regional office headed by a Deputy Town Planner, assisted by two Assistant Town Planners and with supporting technical and non-technical staff, was established in the principal city in each region so as to provide professional services to the local bodies nearer to their area. The regional offices were delegated some powers to render final advice to the local bodies on certain matters and for others they seek the advice from Jaipur.

Subsequently in October, 1970 as the work increased, the regional offices were grouped into three zones, East, South and West, each zone placed under the charge of a Senior Town Planner. Thus, Jaipur, Ajmer and Bikaner regional offices were up-graded as East, South and West zonal offices, while Alwar, Kota, Udaipur and Jodhpur regional offices continue to be headed by the Deputy Town Planners. Alwar and Kota regional offices form part of the east zone while Udaipur and Jodhpur fall under south zone. The Bikaner office was up-graded because of the substan-

tially increased work load on Rajasthan Canal Regional Plan due to the priority given by the State for accelerating development and colonisation in the command area. This is one of the most prestigious projects this department has been handling and also participating in its implementation.

While the zonal and regional offices primarily provide professional assistance to the local bodies and statutory authorities at local level, the headquarters office in Jaipur provides policy guidance and direction. It undertakes studies, research and evaluation. It also provides consultative services to other organisations like Rajasthan University, Malviya Regional Engineering College and the State Government on important architectural projects. The head office assists the Government in formulating policies and programmes to guide project execution. It assists in evaluation of projects, prepared by local bodies for financial viability and implementation. It has a Planning Research Cell and Planning Legislation Cell to undertake special studies and evaluation of the work which provides the necessary feed-back and for chalk-ing out further programmes. Chief Town Planner is the head of the organisation and he is assisted by about 60 professional and technical officers. The supporting technical and non-technical staff in the Organisation is about 130 and 170 respectively, the total strength of the organisation being about 360. In addition, the Organisation had deputed about 20 professionals to other Government Departments, State level authorities and local bodies to work directly within their Organisations and assist them in their planning programmes. The Chief Town Planner supervises their working as well and provides policy direction.

3.6.18 Tamil Nadu

Tamil Nadu has an area of 0.13 million sq. km. and its population was 48.408 million in 1981. Its decennial growth rate in the period 1971-81 was 17.5 per cent.

Tamil Nadu is the second largest urbanised State in India with 33.00 per cent of its population living in urban centres according to 1981 census figures. The urban population swelled more than three times from about 5 million to 15.2 million between 1941 and 1981. But the distribution of urban population is uneven and certain districts like Dharampuri and Kanyakumari have very low percentage of urban population, while Madras, Madhurai, Coimbatore, Thirunelveli and Chingleput districts account for about 60 per cent of the State's urban population. Therefore a State urbanisation policy is thought of, with the goal of judicious containment and scientific regulation of

further urban growth and systematic development of human settlements.

A new development planning strategy is evolved by the Directorate of Town Planning in Tamil Nadu and accordingly the State has been divided into eight planning regions. Regional plans have been drawn up for these regions and they are now under scrutiny. Each region has a Regional Planning Authority and the Madras Metropolitan Development Authority is specially constituted for Madras region. The regional plans identify the growth centres and the policies enunciated in these plans are translated into action through the master plans and detailed development plans in urban areas and district plans and block area plans in rural areas.

The Directorate of Town Planning, similar to its counterparts in Karnataka and other states, assists various local bodies and urban development agencies in planning and development of human settlements. A number of town planning schemes under the original Madras Town Planning Act 1920 are continued under the new Tamil Nadu and Country Planning Act 1973. The Department has provided necessary technical staff to the Madras Metropolitan Development Authority constituted in 1975 and to important Municipal Authorities to help them in their planning work.

3.6.19 West Bengal

West Bengal has an area of 89,000 sq. km. and its population in 1981 was 54.581 million. Its decennial growth rate in the period 1971-81 was 23.2 per cent.

The Town and Country Planning Branch of the Development and Planning Department is responsible for town and country planning in the State of West Bengal. Recently, the Public Works (Metropolitan Development) Department has been established to oversee the activities of Calcutta Metropolitan Development Authority, Calcutta Improvement Trust, Howrah Improvement Trust and few other similar bodies. The Town and Country Planning Branch has three Directorates—one each in Calcutta, Asansol and Siliguri—to look after the planning of these three areas and their environs. The Town and Country Planning Branch has prepared Basic Plans for three centres. A statutory authority (CMDA) has been constituted for Calcutta Metropolitan District, and the Authority has already worked on the development activities worth Rs. 250 crores during the last few years.

The Commerce and Industries Department in the Government has identified eight growth centres, viz. Siliguri, Asansol, Santaldih, Haldia, Kalyani, Kharagpur, Durgapur and Farakka. Out of these, Asansol Planning Organisation has prepared plans for Asansol,

Durgapur and Santaldih, Siliguri Planning Organisation for Siliguri and C.M.P.O. for Haldia. The CMPO has also carried out some studies for Kalyani, Kharagpur, Farakka. Besides, a plan for Digha as a tourist resort has been worked out by the C.M.P.O. While in Durgapur a development authority already exists, very recently the Haldia Development Authority has been constituted to promote the development of Haldia Industrial Urban Complex and its surrounding region. As for district and sub-divisional towns, the Officers of the Town and Country Planning Branch of the Development and Planning Department visited some 34 districts and sub-divisional towns and helped the district authorities to finalise their development programmes.

Three other Development Boards exist in the State to promote and co-ordinate development works in three regions—North Bengal, Sunderban and Jhargram with emphasis on rural development. That apart, Hill Areas Development Committee looks after the development of Darjeeling region in particular. While general policies and programmes in the field of urban and regional development of the State emerge from the recommendations of the Committee of Ministers-in-charge of Housing, Planning and Urban Development, the State proposes to attach considerable importance to a balanced development of a rural urban continuum.

The following dates can be considered as benchmarks in the evolution of town planning in West Bengal :—

- 1959-60 An epidemic of cholera broke out in Calcutta. World Health Organisation (WHO) came to the rescue of Calcutta and suggested that such epidemics can be prevented if proper care is taken to plan the town. They suggested that a metropolitan plan for Calcutta should be prepared to organise the further development of the city.
- 1962 Calcutta Metropolitan Planning Organisation was created by the Government of West Bengal to prepare a Development Plan for Calcutta Metropolitan Area.
- 1964 Two more Planning Organisations, namely
 - (a) Asansol Planning Organisation;
 - (b) Siliguri Planning Organisation were created under the overall supervision of CMPO.

The main task before these Planning Organisations was to prepare development plans for Asansol and Siliguri.

- 1966 The Calcutta Metropolitan Planning Organisation published three major planning documents related to CMD area :
- (a) Basic Development Plan for Calcutta;
 - (b) Traffic and Transportation Plan Calcutta and
 - (c) Howrah Area Development Plan.
- 1966 Haldia Planning Cell was established (although the Cell was originally started in 1962-64).
- 1967 CMPO published a report entitled 'Regional Approach to Planning'.
- 1966-68 The outline development plans for Asansol and Siliguri were published.
- 1970 Calcutta Metropolitan Development Authority (CMDA) was created for the implementation of a Basic Development Plan (BDP) prepared by CMPO.
- 1980 West Bengal Town and Country (Planning and Development) Act, 1979, was approved by the Government. In the Act following authorities were created—(i) Calcutta Metropolitan Development Authority (CMDA) came within the fold of this Act; (ii) Haldia Development Authority; (iii) Asansol Durgapur Development Authority.

3.6.20 Manipur

Manipur being located in the North East corner of the country is surrounded by small hilly ranges and valley at the centre with salubrious climate. It had a population of 1.421 million in 1981 of which 0.375 million were urban in 1981. Its area is 22,000 sq. km. Its decennial growth rate for the period 1971-81 was 32.5 per cent.

The Town Planning Department in the State has been functioning since 1965 and the Manipur Town and Country Planning Act was enacted in May 1975 to oversee the development aspects of the settlements and regions of the state. The State Town and Country Planning Board, and the Planning and Development Authority were constituted, respectively in July and September, 1975.

Master Plan for the Capital city Imphal has been prepared and published in May, 1976; and detailed development plans have also been prepared and are being implemented. Further, developmental plans for district headquarters such as Churachandpur, Tamenglong, and Ukhrul have been prepared and are at different stages of implementation. Infrastructure development in cities and towns, like Nambol, Moirong and Kakching have been taken up and is

being co-ordinated by the Planning and Development Authority. Proposals are contemplated for the preparation of development plans for all the main towns in the state to promote all-round urban development on planned basis.

3.6.21 Pondicherry

The erstwhile French Enclave of Pondicherry which really comprises of 4 units, namely, Pondicherry and Karaikal to the south of Madras, Yanam north of Madras and Mahe on the west coast, north of Calicut, have a total area of 500 sq. kms. and a population of, 0.604 million in 1981 of which nearly 0.3 million are urban.

Planning activities are mainly concentrated in the area in and around Pondicherry town and Karaikal and a Department of Town Planning has been in existence over the last few years.

Pondicherry was the first Union Territory in India to have planning legislation on the basis of the Model Town and Country Planning Law. The Pondicherry Town and Country Planning Act, 1967 is in force and under this Act planning authorities have been created for Pondicherry and Karaikal. Development functions are, however, not adequately organised and the Act is likely to be amended to cater for these functions. Under the Act, a draft plan has been prepared for Pondicherry and also the TCPO is assisting this Union Territory in preparing a Regional Plan.

The Department is fully consulted on all issues relating to physical planning and it is expected that the status of the Department will improve once comprehensive planning and development legislation is available.

3.6.22 Tripura

Tripura which became a full-fledged State in 1971 covers an area of only 10,000 sq. km. In 1971 it had a population of 1.556 million of which only 0.162 million were urban through 6 settlements, none of which had more than 0.1 million inhabitants. Its decennial growth rate has been a high 36.28 per cent in the period 1961-71 and this land-locked area has a large rural base.

Urban and regional Planning in the State is governed by the Tripura Town and Country Planning Act, 1975 which is in force at present. This is primarily a planning Act and proposals are now being made to have it appropriately amended so as to cater for development functions. Under this Act only one plan has been prepared, i.e. for Agartala capital and this is not yet statutory in nature. At present the department has three posts of qualified

planners comprising of one Town and Country Planner and two Assistant Town and Country Planners all of whom function from Agartala but are responsible for planning activities over the entire State.

Unfortunately the Department at present is part of the State P.W.D. but once the Act is strengthened it is likely that the Department would have its independent identity and greater function in the planning and development process.

3.6.23 Delhi

Evolution of urban planning in Delhi may be traced from the establishment of its 9 cities in different periods starting from Indraprastha in ancient period to largely expanded Delhi in post Independence period. However, in the modern context of urban planning Delhi had significant bench-marks during the 20th century.

These may be identified as follows :

- (i) The shifting of the British ruling seat in India from Calcutta to Delhi 1911. This brought up a Civil Lines area along with temporary administration area on the beautiful undulating land on the north of Delhi (Shahjanabad). The railway lines and a large open space were used as buffer zone between the new and old development areas.
- (ii) The planning and development of New Delhi by Sir Edwin Lutyens during 1911-20. The design of this New Delhi capital was based on the hierarchy of nodes connected by roads in several directions. It was a new urban design experiment in India.
- (iii) Establishment of Delhi Improvement Trust in 1937 which was to prepare specific urban development schemes.
- (iv) Setting up of the provisional Delhi Development Authority in 1955 to check the haphazard and unplanned growth of Delhi following partition of the country in 1947. Setting up of Town Planning Organisation (TPO) to advise the authority on all matters relating to planning.
- (v) Preparation of interim general plan by TPO in 1956 to guide the planned development of Delhi for a period of 2-3 years until a comprehensive long-range plan was ready. Constitution of Delhi Development Authority in 1957 under the Delhi Development Authority Act, 1957 of the Parliament. The Authority was to promote and

secure planned development according to the Master Plan. The same year the comprehensive 'Delhi Municipal Corporation Act 1957' was enforced broadening and defining the powers and functions for the identified categories of areas.

- (vi) The preparation of draft and final Master Plan during 1960-62 by the Town Planning Organisation. Town Planning Organisation and Central Regional Urban Planning Organisation (CRUPO) of the Central Government of India, merged to form the existing Town and Country Planning Organisation.
- (vii) The enactment of Wild Life (Protection Act, 1972).
- (viii) Constitution of a high powered board under the chairmanship of Union Minister for Works and Housing with Chief Minister of Haryana, Uttar Pradesh, Rajasthan, and Lt. Governor of Delhi and other senior officers as members, in 1973 for the planning and development of the National Capital Region. Town and Country Planning Organisation, New Delhi, prepared a Draft Plan in 1973 itself.
- (ix) The enactment of Water (Prevention and Control of Pollution Act), 1974;
- (x) The enactment of Air (Prevention and Control of Pollution Act), 1987;
- (xi) A preparation of Draft and Final Master Plan Delhi for 2001 during 1979-87 under the Delhi Development Authority Act.
- (xii) The National Capital Regional Planning Board Act 1955, replacing the earlier ordinance was passed by the Parliament in 1985. Consequently, the NCR Planning Board was constituted.
- (xiii) Preparation of interim Development, Draft Development and final Development Plan for NCR, 2001, in 1986-87.

In addition to the above description of evolutionary bench-marks of urban planning in India which are based on literature survey, a comparative statement of planning evolution in the states and union territories is given in Table 3.1. The comparative statement is derived from the questionnaire completed and supplied by the related planning organisations. The planning evolutions have wide variance starting from some important side developments to the enactment of Act and establishment of organisations. The associated reasons cover the felt needs, development works

as related to other states and the requirements of the Act for plan implementation.

3.7 Conclusions

A review of the evolutionary stages of urban planning in India can be concluded as under :

- (i) The Master Plan concept for development works over a predecided 15–25 years was evolved in Britain and necessary legal provisions were made through acts, ordinances, rules and regulations. India borrowed the approach and started applying from the Third Five Year Plan (sixtees) onward. The experience of implementing the master plans in India and other countries has revealed that the approach has failed to promote desired developments. Both Planners and decision-makers were tied with the master plan proposals. The dynamic forces of growth in time could not be dealt with by the rigidities of master plan. Technological innovations could not be used easily. People at large were left out of planning process. The problems are still worse in India where public awareness is very low to interact at planning stage; sentimental attachment to land/property is high, and the public sector resources are meagre. The revisions of master plans expected periodically could not be possible due to inadequate technical manpower, and traditional method of data collection, analysis and decision-making. A Master Plan prepared after 2-3 years of hard work takes another several years for legal approval. The delay in plan preparation and approaches nullifies the validity of proposals. Thus, India needs to have planning and development approach which is flexible and based on more participatory and flexible concepts. The provisions of all related acts have to be changed accordingly.
- (ii) During the ANCIENT PERIOD town and villages were planned on the basis of definite street patterns related to cordial directions and the major functions of the proposed settlements. Place of worship occupied the central location in the layout. The residential and work areas were defined on the basis of caste-related occupational patterns. Wall and moat defined the urban limits as distinctly different from country side. The lessons of this experience are :
 - (a) Detailed guidelines worked out for site selection and street layouts can be effectively used even today.
 - (b) The concept of work-cum-living areas can be utilised even in the modern context through the planning of selective mixed land use areas.
 - (c) The concept of relating circulation pattern with major functions of the town can be utilised at the neighbourhood or sector level planning exercises.
- (iii) During Hindu Period, nobility, patronised the places of worship in the towns and cities. Large number of capital cities were built with extensive Bazars (Linear Markets) and monumental town squares, under the patronage of kings. A number of small towns came up with centres of higher learning as a focus. Villages in particular and rural areas in general were dominated and controlled by towns and cities, where surplus wealth permitted leisure and other higher order intellectual activities related to arts and crafts. Wall and moat was considered a necessity for the security of the city. The lessons of this experience are :
 - (a) Major factors that influenced urban planning in this period were religious values, strong sense of geometry in terms of layouts, potent regional context and dominant security aspects. Although the way of doing things may have changed over the years, still the above factors are important in any urban planning project.
 - (b) Patronage to craftsmanship resulted in refined architectural styles in this period. A strong sense of town architecture (or Urban Design) shall always remain an asset to the profession of town planning and design.
- (iv) During Muslim Period, Mosque as a place of worship came into focus. Moghal rulers were great monument builders. Towns and cities built by Moghals had rich landscape content in addition to a significant number of public and private building of architectural value. Baghs (Gardens) and Bazars flourished under the patronage of Kings. Wall and moat continued to define the city limits. Urban design was better understood and employed to impart character and strength to

the concepts of urban planning. The lessons from the works of the Muslim period are :

- (a) Selective use of areas with flowing water and judicious placement of flowering as well as evergreen trees transform the sharp edges of local climate in favour of the inhabitants.
 - (b) Shaded streets and linear markets still have potential in terms of modern urban design and urban planning concepts related to residential areas.
 - (c) Strong devotion to axial and introvert planning created a number of unique urban complexes that are still the subjects of study for urban planning and design students.
- (v) During the British Period the traditional linkages between the urban and rural areas were modified in the interest of rulers. Large cities with part facilities flourished at the expense of other smaller settlements. Industries and Railways altered the built-environment and life-styles in Indian towns and cities. Beginning of the 20th century saw the consciousness towards town planning in India in modern terms. A number of Town planning Acts came into being. Improvement trusts were created to tackle the problems of improvement in towns and cities. Bhore Committee appointed in 1946 suggested the structure of Town Planning Departments to be established at State level. The lessons of this experience are :
- (a) Town Planning still had a strong sense of urban design principles. This cannot be totally dispensed with even today.
 - (b) The principle and practice that the socio-economic status of beneficiaries of plan and planning should be ascertained before hand, is still considered as an important part of the planning methodology.
 - (c) That the process of plan-making and implementation needs legal backing, has been more specifically felt in recent year.
- (vi) Post-Independence period in Town Planning was marked by rapid changes in the form and content of urban planning. From the

problems of refugee rehabilitation, to project towns, to planning of Capital cities to numerous master plans for existing towns and cities and finally the implementation of urban plans under the umbrella of National Five Year Plans have taught many lessons to the planners. Establishment of Town Planning Departments have enriched the profession by bringing in the regional experiences and problems to the focus. The ever-growing search for right kind of solutions are continuing in the field of urban planning. Lessons of this experience so far are:

- (a) Town and Country Planning should be carried on scientific informational and analytical basis;
 - (b) Modern techniques of 'Remote Sensing' should be used effectively in conjunction with computerised information base, so that the subjectivity in planning decision-making process could be reduced effectively.
 - (c) Town and Country Planners should acquire capabilities in Development Management so that they can play responsible role in the implementation of plans;
- (vii) The good experiments for planning and development of some states should be extended with necessary modifications to all other parts of the country. For example, the Urban Community development programme of Hyderabad has been very successful. The regional planning experience of Tamilnadu and Maharashtra is quite advanced.
- (viii) Establishment of Town and Country Planning Organisations at state levels helped in creating general awareness about the necessity of planning the towns and cities to enhance the quality of life of its inhabitants. It has also helped in effective tackling of regional issues related to settlement planning in various cases. The enactment of various pieces of legislations by the State Governments have provided required legal backing for town and country planning. Some of the states are revising their existing acts to remove the shortcomings and legal lacunae that had crept in earlier,

Generally the state level Town and Country Planning Organisations are engaged in following activities :

- (a) Preparation of Master Plans for selected towns and cities;
- (b) Preparation of Regional Plans for selected regions;
- (c) Conducting traffic and transportation in some of the cities;
- (d) Preparation and in some cases implementation of projects under Central Government sponsored, IDSMT scheme in selected towns;
- (e) Preparation of Town Planning Schemes.
- (f) Training of Town Planners and other related officers in the Department and local bodies.

(g) Helping City Development Authorities in the planning and development activities; and

(h) Advising various state governments departments in matters related to planning and development.

Besides this, the experience of preparing and implementing a Master Plan for Delhi, Basic Development Plan for Calcutta and the Structure Plan for Madras have distinctly enriched the planning methodologies being followed in India.

Mention must be made in this context, of the experience, that has accrued to the physical planners in India, through the exercises of preparation of plans for National Capital Region, Western Ghats and earlier for South East Resource Region and DVC. These are land-marks in the field of Regional Planning in India.



Legislative Support for Urban Planning and Development

Urban planning and development is a legal process of introducing constitutional goals, government policies and programmes regarding land use. It must have a proper legislative support to subserve the common good in the context of present and future needs. The legislative support has to be related to the three distinct stages of development—(a) plan preparation; (b) approval and adoption; and (c) enforcement with incentives and controls. The provisions have to be judicially sound also. The newly emerging demands of the society and the availability of new techniques require introduction of changes in the existing laws and addition of new laws relating to urban planning from time to time. An attempt is made in this section to have an overview of the existing urban planning related Acts and the rules and regulations in India with an objective to identify their impact and problems.

4.1 *Growth of Legislative Support*

With a growing national consciousness of the importance of urbanisation, urban development and regional planning in the country's national development efforts, the need and urgency to provide effective legal tools at various levels have been emphasised again and again. The attempts in this direction have resulted into the planning laws and regulations. Looking back, it is found that in India, in the early part of the twentieth century, town planning was considered a part of the municipal administration and health but as problems gradually assumed greater proportions both with regard to the scope and complexity, improvement trusts were set up (Bombay : 1898, Mysore : 1903, Calcutta : 1911, Uttar Pradesh : 1919, Punjab : 1937, Nagpur : 1937, Delhi : 1937) to formulate and implement town improvement schemes. In the meanwhile, town improvement schemes were also undertaken under the Town Planning Acts which were introduced in some of the States. The earliest Town Planning legislation in India was enacted by the

Government of Bombay in the year 1915 which was followed by other provinces, that is, Madras (1920), United Province (1919) and Punjab (1922). Town Planning and town improvement activities have been carried out within the framework of such legislation during the last five decades. It would be seen that these Acts did not intend nor did they provide for comprehensive planning which has now come to be accepted as most necessary for directing and regulating urban and regional development. The earlier enactments only provided for undertaking town improvement schemes by the local bodies from the point of view of public health, sanitation, etc. With the industrial growth coupled with urbanisation taking place during these decades, there has been a growing recognition of the need for viewing urban development not merely as construction of houses or provision of water supply and other community facilities in an unrelated manner but as one whole integrated development in which each sector has a definite functional role to play. Contemporary development planning has brought about a realisation of the need for comprehensive town planning legislation at the State and local levels. A Committee on Health Survey and Development constituted under the chairmanship of Sir Joseph Bhore, after taking note of the existing planning legislation in the country, recommended the enactment of a uniform planning law to deal with urban rural areas. The Committee further recommended that the Central Government should draw up a Model Town and Country Planning Law which could be adopted by the States.

Following the recommendation, the first Model Town and Country Planning Law was prepared by the erstwhile Central Regional and Urban Planning Organisation in 1960 on the basis of an earlier draft drawn up by the Institute of Town Planners, India. The Model was considered by the first Conference of State Ministers for Town and Country Planning

held in 1961, which set up a Committee of Ministers from several States to examine the Model Law and make suitable recommendations. The Committee, after carefully considering a number of comments received from the State Governments examined the Model Law in great detail, revised it and recommended the same for consideration by the Second Conference of State Town and Country Planning Ministers held in 1962. The Conference considered the Report of the Committee on the Model Law and recommended the revised version of the Model Law to the State Governments for their consideration and adoption. In pursuance of this recommendation, most of the State Governments have been taking steps to revise their existing planning laws. Some of them have enacted laws on the basis of the Model while others are revising the existing legislation to meet their individual requirements. In the meanwhile, the Government of West Bengal set up a Legislation Commission to study the Model Law and to advise the Government on a suitable form of planning law in 1962. The Commission examined the Model Law in great detail and expressed certain views and comments in its final report. The Fourth Conference of State Ministers for Town and Country Planning took note of these and considered it desirable that the recommendations of the Commission on the Model Law should be further examined by a Committee which might suggest any change and improvements in the Model Act. The Conference also felt that the past experience in adapting this Model Law to the conditions obtaining in different States might also be taken note of by this Committee while suggesting change or improvements in it. The Committee examined the West Bengal Legislation Commission's Report as well as the various comments and suggestions made by the State Governments and others and suggested a small number of minor modifications in the Model Law which had since been incorporated. The Model Law has been constantly under review since then by taking note of the working of the State Planning Act in various States and the alternate viewpoints that have emerged from our experience and developments in the field of planning legislation abroad.

With a view to ensuring better overseeing and coordination of planning with plan implementation, the Model Law which dealt with the planning aspect only has been reviewed and revised and now a combined planning and development law has been formulated in consultation with the concerned Central Government Ministries. Under this law, planning and plan implementation have been combined together so that a single agency could undertake both these functions.

To do this, the planning and development authority to be constituted under the law has been equipped with full planning and development powers to discharge this task.

Industrialisation, urbanisation and environmental degradation have given rise to municipal Acts, public health laws, town planning legislation and recently, the environmental Acts. The process of providing legislative support has largely been influenced by the trends in U. K.

The Government of India introduced a new type of urban legislation called 'The Urban Land (Ceiling and Regulation) Act, 1976' with the objectives as (i) To prevent concentration of urban property in the hands of a few persons and speculation and profiteering therein; (ii) To bring about socialisation of urban land in urban agglomerations to subserve the common good by ensuring its equitable distribution; (iii) To discourage construction of luxury housing leading to conspicuous consumption of scarce building materials and to ensure equitable utilisation of such materials; and (iv) To secure orderly urbanisation. This Act (ULCER) has eight main provisions as under :

- (i) Imposition of a ceiling on both ownership and possession of vacant land in urban agglomerations, the ceiling being on a graded basis according to the classifications of the urban agglomeration;
- (ii) Acquisition of the excess vacant land by the State Government with powers to dispose it to subserve the common good;
- (iii) Payment of an amount for the acquisition of the excess vacant land in cash and in bonds;
- (iv) Granting exceptions in respect of certain specific categories of vacant land;
- (v) Regulating the transfer of vacant land within the ceiling limits;
- (vi) Regulating the transfer of urban or urbanisable land or any building for a period of 10 years from the commencement of the construction of the building whichever is later;
- (vii) Restricting the plinth area for the construction of future residential buildings; and
- (viii) Other procedural and miscellaneous matters.

The Act is applicable to selected, urban settlements. It has created more problems for proper physical planning and development than the support due to the defective operational situations. It requires improvements.

4.2 Types of Planning Acts

During the twentieth century, particularly after Independence, a large number of urban planning and development related Acts have come in force at the Centre and State level, as given in Table 4.1. These can be broadly divided into two categories :

- (a) directly related, and
- (b) indirect related.

The second category of Acts include municipal Acts, mandi Acts, land revenue Acts, village panchayat Acts, highway Acts, historical monuments and archaeological sites Act, hilly area Acts.

4.3 Impact of Planning Acts

These have helped urban planning and development to systematize the process and actions on various aspects. New issues/situations are covered by new Acts periodically. The good impact is visible all over the country in all types of urban areas. The main problems relating to the legislative support are due to :

- (a) Rigidity of the contents.
- (b) Ambiguity of some directives.
- (c) Malfunctioning of the responsible agencies.
- (d) Overlaps with the provisions of other Acts.
- (e) Conflict with the provisions of other Acts.
- (f) Coordination amongst agencies, operation under different Acts relating to urban planning and development.
- (g) Different Acts operative at different area.
- (h) Absence of Acts dealing with total area i.e. regional planning in some states.

It is felt strongly that planning-related legislative support should be reviewed periodically to make it upto date with new socio-economic and techno-political changes and comprehensive. One such recent attempt in this directions is the 'Model Regional and Town Planning and Development Law' prepared by the Central Town and Country Planning Organisation in 1985.

4.4 Model Regional and Town Planning and Development Law, 1985

The Model Regional and Town Planning and Development Law, 1985 provides for the constitution by the State Government of State Regional and Town Planning Boards for the purpose of advising on the delineation of regions for planned development and directing the preparation of metropolitan and regional plans by the metropolitan, regional and

area planning and development authorities co-ordinating the planning and implementation of physical development programmes and the setting up of metropolitan, regional and area planning and development authorities for different urban and rural areas within the state to undertake preparation of development plans and to enforce and implement them. An area planning and development authority may be a local authority or an authority set up separately for the purpose of undertaking plan preparation, plan enforcement and plan implementation. The Model Law provides for three steps in the administration of this. Firstly, there will be the preparation of the existing land-use map, thereafter the preparation of an outline development plan and comprehensive development plan and their enforcement and lastly preparation of detailed schemes of development or redevelopment as envisaged in the plans and their implementation.

The machinery conceived for plan preparation enforcement and implementation consists at the State level of a State Regional and Town Planning Board, a Chief Town Planner to the State who is also the secretary to the State Regional and Town Planning Board and constitution of metropolitan, regional and area planning and development authorities for each planning area designated under the Law. The Model Law also provides for constitution of Consultative and Co-ordination Committees at the metropolitan and regional levels to advise the metropolitan and regional planning and development authorities on the preparation of metropolitan and regional plans and co-ordinate the annual plans and programmes and overall functioning of various development agencies and Government Departments functioning within the concerned planning areas. The State Regional and Town Planning Board and the Chief Planner supervise the work of the planning and development authorities and advise the State Government on all matters concerning urban and regional planning and development within the State.

While formulating the Model Law, the provisions of the various existing town planning Acts such as the Maharashtra Regional and Town Planning Act, 1966, Tamil Nadu Town and Country Planning Act, 1970, Madhya Pradesh Nagar Tatha Gram Nivesh Adhiniyam, 1973, Delhi Development Act, etc. have been carefully examined. The limited experience that was available of their working and the alternate viewpoints that have emerged have been taken note of. Necessary consultations have also been held with the concerned Central Government representatives and State Planning Departments, development officials and professional experts and

the legal people in regard to the essentialities of certain provisions in the Model Law. The developments in the field of planning legislation abroad have also been studied in the preparation of the law. The language and the terms used are as far as possible unambiguous and precise. In any case, the Model Law attempts at best to provide broad legal framework for undertaking comprehensive planning legislation in the States and it may be considered for adoption with such modification as may be necessary, depending on the particular requirements of the State thereby serving the long-term interests of the community and the region as a whole within the broad framework of accepted national goals and objectives.

4.5 Conclusions

The analysis of legislative support for urban planning and development leads to the following conclusions and lessons for future improvements :

- (a) Town Planning Legislation enacted by various State Governments, until recently, did not intend nor did they provide for comprehensive planning, which has now come to be accepted as most necessary for directing and regulating urban and regional development.
- (b) Contemporary development planning has brought about realization of the need for comprehensive town planning legislation at the State and local levels.
- (c) Over the years, the Model Law has been perfected to take care of the needs of

Town and Country Planning profession. Under the revised law, now, planning and plan implementation have been combined together so that a single agency could undertake both these functions.

- (d) After Independence a number of urban planning and development related Acts have come into force at Central and State level. Some of these are directly related to urban planning, others are indirectly related. New issues are covered by the new Acts periodically.
- (e) The urban land (Ceiling and Regulation) Act, 1976 has laudable objectives but due to the large ineffectiveness it needs systematic evaluation and revision.
- (f) It is strongly felt that legislative support related to urban planning should be reviewed periodically to relate it with the new socio-economic and techno-political changes. The Model Regional and Town Planning and Development Law, recently published by TCPO, Ministry of Urban Development, Government of India can be cited as a right step in this direction.
- (g) The Model Regional and Town Planning and Development Law attempts to provide broad legal framework for undertaking preparation of comprehensive planning legislation in the states, with such modifications as may be deemed fit in each case and from time to time.

Urban Planning and Development Organisations

The historical study of cities since Mohenjodaro—Harappa about 3500 B.C. reveals that the development and maintenance of cities was always done by a separate agency. The composition, size, and functions of these agencies have been different through the ages; like king and his advisors, a city council, a panchayat, a separate committee, a town council, or a public works department. During the Mauryan and Gupta period, the work of urban planning and development was performed by elected city council and elected town councils with other functions of the state. The Mughals had a separate department for the construction, development and maintenance of cities. The department was headed by the emperor himself but it had many eminent architects, engineers, and ministers as its members. The British introduced the English system of municipalities, and improvement trusts. India after Independence added the urban development authorities and special area/special function authorities. Thus there is a large variety of planning and development organisation in India. These are analysed under the broad headings of 'typology and functions'. Details of some selected Urban Development Authorities, Operational Issues, Issues for Organisation in future, and Conclusion.

5.1 Typology and Functions

Urban planning and development organisations are grouped in the following two categories :

(a) Local/Regional and State level; and (b) National level. Their main features are discussed as under :

5.1.1 Local/Regional and State Level Organisations

(i) *Municipalities*—Their origin is associated with the British rulers in the later half of the 15th century. The main motive of the colonial rulers was to mobilise local fiscal resources for local works such as water supply, drainage, primary education, public

health, roads and streets, parks and play-grounds, street lighting as well as enforcing building bye-laws and maintenance of local police force by associating influential Indians with local administration (For details of functions and structure or organisations refer Tables 5.1, 5.2, 5.3, 5.4 and 5.5). Later, reforms were introduced wherein progressive element of election was brought into the local bodies, ultimately ending up with the process of introducing elected council with elected Chairman by 1920 under the Montague-Chelmsford Reforms.

However, the British did not want the municipal governments to be strong, as they had created them as concessions to the national sentiments and to assuage the feelings of national leaders who were then fighting for greater participation of the Indian people in the government. These local self-governing bodies were largely left to themselves without any technical and administrative guidance or financial support.

The first Municipal law enacted in 1842 known as 'The Bengal People Act, 1842' was applicable to some towns in Bengal only. It was followed by an Act XXVI of 1850 which was applied to Bombay and North-West Provinces. In 1863, an act was passed to establish the Calcutta Corporation. Subsequently, the Act of 1876, where more elected members were introduced replaced the earlier act. The municipal system was clearly devised by Sir Rippon in 1882 in England and the same was brought to India. In 1885, the Bombay Corporation was formed under its own act which was replaced by another act in 1888, allowing more elected members. It was again amended in 1907 bringing primary education, medical relief and other allotted work to the Municipal Corporation.

Delhi got its first civic body in 1883 which continued working without much change till 1911 when Delhi was declared as the Imperial capital. In 1946

the Delhi Municipal Committee was given the right to elect a president in place of the Deputy Commissioner. Initially, three Presidency Towns of Calcutta, Bombay, and Madras had Corporations and other urban places had municipalities called by different names in different states. The Bombay Act has served as a basis to all other municipal acts.

(ii) *Improvement Trusts*—With the objective of not letting the municipal institutions (which were gradually being handed over to Indian elected representatives) grow in power, improvement trusts started to be created. Municipalities were not entrusted with the major tasks of planning and executing capital development projects.

The British introduced the English System : Calcutta had the first urban improvement authority in 1794 under a special statute giving limited powers. Based on its experience, a Town Improvement Committee consisting of nominated leading citizens of Calcutta was constituted in 1803. The Committee was recognised as a Board in 1847 which had 4 out of the 14 members selected by tax payers. In 1864, on the example of Calcutta and on the advice and insistence of the Royal Sanitary Commission, the Sanitary Commissions were set-up in Bombay and Madras Presidencies. Bombay had a Municipal Corporation formed under its separate act in 1885. This was followed by the Municipal Corporation in Calcutta in 1899. In 1898, under the Bombay Improvement Act, the first Improvement Trust of Bombay was established. Encouraged by the working of Calcutta and Bombay Improvement trusts, the Government of Mysore passed the city of Mysore Improvement Act in 1903 and accordingly constituted the Mysore City Improvement Board. Thereafter, the post war era (1914–18) had the U.P. Town Improvement Act, 1919, the A.P. Town Improvement Act, 1920, the Punjab Improvement Act, 1922, and the Nagpur Improvement Act, 1926, which resulted into many urban planning agencies.

The main task of improvement trusts were to acquire land under the Land Acquisition Act, 1894; sub-divide the land into plots for houses, open spaces, schools, hospitals, other public facilities and roads and sell the plots for private ownership and development in accordance with the rules prescribed. Development works such as construction of roads with the street lights, drains, sewers, water supply, and provision of electricity within the area covered by town planning schemes were undertaken by improvement trusts. Whereas, in some cities, improvement trusts were involved in road widening works and development of adjacent areas, at some

other places they were engaged in improving extremely congested areas by slum clearance and undertaking housing projects for the low-income groups. By the institution of the improvement trusts, the British rulers saw to it that the main task of the municipalities remained merely at the level of maintaining the local works which were handed over to them by the improvement trusts after completion.

However, the role of municipalities in terms of urban planning began to grow during 1920s, when some of the states such as Bombay, U.P. and Madras began to enact town planning legislations. For instance, the Bombay Town Planning Act vested the local authorities with enabling powers for development of new areas and redevelopment of existing areas. Similarly, the Madras Town Planning Act went even a step further by making it obligatory upon local authorities to prepare general town planning schemes with respect to land under their jurisdiction and in the immediate vicinity.

(iii) *Town Planning Departments*—By 1920s, foundations were laid for the institution of state-level town planning departments. Bombay had established a Town Planning and Valuation Department in 1914. Town and Country Planning Department of Andhra Pradesh was created in 1920 followed by the Directorate of Town and Country Planning, Madras by 1922. The Health Survey and Development Committee under the chairmanship of Sir Joseph Bore, in their report in 1946, had made recommendation for the creation of well-equipped provincial directorates of planning and also for a town planning advisor in the Central government to advise and scrutinise town planning schemes prepared in different provinces and submitted to the Central government for financial support. The Committee had also suggested creation of improvement trusts in all the large cities in India.

After India gained independence in 1947, the country was faced with the gigantic task of coping with the problem of refugee rehabilitation. This was the time when many refugee towns were required to be built almost over-night. The economic development efforts that were initiated after Independence unleashed forces of urbanisation and the rate of growth of several urban centres began to get accelerated both in terms of area and population. Consequent to such trends, lack of organisation of town planning departments became glaringly apparent. The period from 1950 onwards was the period of consolidation of existing organisations related to urban planning as well as creation of several new ones oriented to undertake specific tasks.

Many more States enacted town planning legislations and established town planning departments. Some States made applicable to their territories the provisions of existing town planning acts in other states and created organisations for town planning. By early 60s fourteen of the then 15 states had established town planning departments either independently or under local-self government departments. Though still some of the States had empowered local bodies to prepare town planning schemes or master plans and enforced such schemes and plans, town planning had truly become a State function rather than a municipal function.

(iv) *Special Purpose Agencies*

(a) *Housing Boards*

The period 1951—71 saw the creation of many special purpose agencies dealing with specific subjects within the realm of urban development. For instance, a City Improvement Board was created for Hyderabad in 1956 with a view to organising development activities and services. This City Improvement Board was converted into Andhra Pradesh Housing Board to give specific attention to the problem of housing not only in the city of Hyderabad but also in other towns and cities of the State. Such state level housing boards were created in several states as well and are still existing e.g. Tamilnadu Housing Board, Rajasthan Housing Board, U.P. Housing and Development Board, Haryana Housing Board, and Punjab State Housing Board.

(b) *Slum Clearance Boards*

Slum clearance boards were created in several states under various arrangement e.g. in Tamilnadu, the Slum Clearance Board operated from within the Tamilnadu Housing Board till 1971 but was created as a separate entity in 1979 to specifically look after the problems of slums in the city of Madras. In the State of Andhra Pradesh, no separate Slum Clearance Board was created. Problems of slums are looked after by the municipalities. In some of the other states, the slum clearance boards are now known as slum improvement boards. The city of Kanpur had, for a long time, a Kanpur Development Board. In states like Tamil Nadu and Andhra

Pradesh, Industrial Infrastructure Development Corporations have been created to give special attention to the problems of industries.

(c) *Metropolitan Region Development Authorities*

By the late 1960s, some of the metropolitan cities had begun to enact metropolitan regional planning act, delineate boundaries of metropolitan regions, and create regional planning boards. Such effort was first made in the case of Delhi. The Delhi Master Plan published in 1961 had also delineated a Delhi centred region known as the National Capital Region. An advisory National Capital Region Board was created in the year 1961. The Board was reconstituted in 1963 and finally given statutory powers in 1985. With the constitution of the NCR Board the first instance of regional planning authorities had begun to be seen. Maharashtra Regional and Town Planning Act was enacted in 1966 and the Bombay Metropolitan Regional Planning Board was constituted in 1967. The Board delineated a Bombay Metropolitan Region and formulated a Regional Plan in 1970. Similarly, the Bangalore Metropolitan Regional Development Authority Act, 1985 has been enacted and Bangalore Metropolitan Region Development Authority created in the same year.

The Rural Development and Local Administration Department of the Government of Tamil Nadu had prepared a report on Regional Planning for Tamil Nadu in 1969. The report suggested division of the State into viable planning regions taking into consideration, the geographical, economic, social and demographic characteristics. In all, eight regions were identified and it was suggested that a regional planning authority should be created in each of the regions. A similar exercise was carried out for the State of Madhya Pradesh. But in none of the two states, any follow-up action has been initiated to legislate suitable regional planning acts to give statutory powers for regional planning efforts and create regional planning authorities.

However, several instances can be cited of special purpose regional development authorities having been created in several states of India. These are in the form

of river valley corporations or river basin authorities, hill area development authorities, special area development authorities and tribal area development authorities. In the state of Bihar Coal Mining Area Development Authority was created to carry out surveys and development plans for the areas around the coal fields. In some of states and Union Territories, landuse boards have been created to evolve policies for optimum utilisation of agricultural and non-agricultural land and to reduce the creation of waste lands. This activity is gaining importance in the context of the recently enacted National Waste Lands Development Act. In the State of West Bengal, Landuse Board has been created to prepare a Landuse Plan and evolve policies for integrated landuse planning in the Calcutta Metropolitan District.

(d) *Urban Development Authorities*

At the present moment, one of the expanding institutions in India is the 'urban development authority'. The foremost urban development authority was created in the country in 1957 in the form of Delhi Development Authority. The Authority was created to replace the Delhi Improvement Trust which was existing then. After the decision was taken in 1956 to prepare a Comprehensive Development Plan for Delhi, it became apparent that limited powers and area available to the improvement trust will restrict the activities for forceful enforcement of the Plan. A need was felt for an area-wide development agency entrusted with the enormous task of implementing the plan proposals for the entire Delhi Urban area.

Later, similarly development authorities were created for Calcutta, Madras and other metropolitan cities of India. Between 1971 and 1987, about 100 development authorities have been created in various towns and cities all over India to carry out integrated urban development as per the comprehensive development plan for the city.

5.1.2 Central Government Level Organisations

Evolution of organisations pertaining to urban planning and urban development as detailed out above has mainly taken place at the state level. As per the Indian constitution, land is a state subject and all the organisations having statutory powers for urban development are, therefore, created by the

State government and Union Territories. However, after the Independence, the Central government has been playing an advisory role by suggesting guidelines and priority areas for planning to the State governments. To carry out an advisory role, the Central government has constituted several organisations :

(i) *Town and Country Planning Organisation :*

A Town Planning Organisation (TPO) was formed in 1955 under the Ministry of Health and charged with the task of preparation of Master Plan for Delhi. The organisation is now named as Town and Country Planning Organisation and operates under the Ministry of Urban Development. Its main function is to guide and monitor Centrally sponsored schemes such as Integrated Development of Small and Medium Towns (IDSMT) and Environment of Urban Slums (EIUS). It also assists the State governments in the preparation of regional plans and renders technical advice in other planning matters such as preparation of World Bank assisted State Urban Development Projects Reports, preparation of development plans for tourists places and pilgrim centres, etc.

(ii) *Housing and Urban Development Corporation (HUDCO) :*

It was set up by the Central government in 1970 and is now the premier financing agency for development of housing all over India.

(iii) *Agencies related to Environmental Control;*

With the year 1969, another phase in the creation of organisations related to urban planning and development began, when a special attention was paid to understand the problems of urban development within the wider contexts of environment and ecology. Maharashtra State had enacted a Water Pollution Control Act in 1969. The Water (Prevention and Control of Pollution) Act was passed by the Central Government in 1974 and the Central Water Pollution Board came into existence in the same year. The Central Air (Prevention and Control of Pollution) Act was passed in 1981. However, the matters pertaining to the air pollution control are being looked after by Water Pollution Control Boards both at the Centre and in the States. A National Committee on Environmental Planning and Coordination (NCEPC) was set up by the Government of India in 1972 to promote research

in the fields of resource management, environmental degradation, ecological aspects of environment, controlling pollution, conservation of natural resources, etc. A National Environmental Act was passed in 1986. Presently, the Ministry of Environment and Forests is co-ordinating activities related to environmental control. But sooner or later national and state level environmental organisations will be set up.

5.2 Details of Three Selected Urban Development Authorities

Delhi had the first urban development authority created in 1957 for undertaking the implementation of Delhi Master Plan. Since then a large number of development authorities (more than 100) have been created in various class-I cities. It is attempted to review the organisational models of three metropolitan development authorities in the country, namely—(a) Delhi Development Authority (DDA); (b) Calcutta Metropolitan Development Authority (CMDA); and (c) Madras Metropolitan Development Authority (MMDA), as they have quite different systems. The other urban development authorities are a mix of these three different models as per local/state conditions.

5.2.1 Delhi Development Authority—This was set up under the Delhi Development Act of 1957. The main objective of this Act was “to promote and secure development of Delhi according to plan”. Section 6 of Delhi Development Act 1957 crystallises the main objective and powers of the authority and may be reproduced hereunder :—

“The objects of the Authority shall be to promote and secure the development of Delhi according to Plan and for that purpose the Authority shall have the power to acquire, hold, manage and dispose of land and other property to carry out building, engineering, mining and other operations, to execute works in connection with water supply, electricity, disposal of sewerage, other services and amenities, and generally to do anything necessary or expedient for purposes of such development and for purposes incidental thereto”.

By this time Delhi Municipal Corporation had also come into being. In order to demarcate the role of municipal authorities and that the DDA is was made clear that, subject to the Master Plan and the Zonal Development Plans, as may be approved by the Central Government under the Delhi Development Act, the local authorities like the Delhi Municipal Corporation and New Delhi Municipal Committee could be

regulating authorities in respect of the building operations and development proposals within the respective jurisdictions. The Delhi Development Authority could be in charge of functions in respect of other areas as may be declared “development areas”. In addition the Central Government was empowered to declare any area as a development area in consultation with DDA and Delhi Municipal Corporation. Co-ordination between the local body and Delhi Development Authority was ensured by including the elected representatives from Delhi Municipal Corporation and the Commissioner of the Corporation on the Authority and the Advisory Council. Subsequently, when the Metropolitan Council for Delhi was established the Act was amended to include three representatives of the Council to the Authority.

In order to enable the Authority to develop land, Sections 15 and 22 of the Delhi Development Act enable Government lands to be placed at the disposal of the Authority. Ownership of such lands placed at the disposal of the Authority would continue to vest in the Government and the Authority would dispose them off only as an agent of the government. Section 22-A, of the Act gives specific powers to the Authority to undertake development of any land transferred to it under Section 15 or Section 22 of the Act irrespective of whether or not it is in a development area.

Under Section 35, the Authority can require the owner of any land in a development area to carry out development as sanctioned and if he fails to do so, to carry out such development and recover the costs thereof. Section 36 enables the Authority to require the local authority concerned to assume responsibility for the maintenance of the amenities already provided in any area developed by DDA and for the provision of amenities which had not been provided, on terms and conditions to be mutually agreed upon between the Authority and the local authority. In case of disagreement, the terms and conditions are to be supplied by the Central Govt. in consultation with the local authority on a reference to be made to the Central Government.

Section 37 of the Act enables the Authority to levy the betterment charges in respect of any land, the value of which has been increased or will increase as a result of the development and this charge is to be credited to the fund of the Authority. The Act envisages the Authority to be an ‘Autonomous Body’ with powers to discharge the duty and the functions assigned to it, to have its own staff and funds.

DDA started with a small number of employees with the specific function of detailing out planning

and development control as per Master Plan. Slowly the Government of India has been assigning to it several functions beyond the provisions of Act like construction of houses, construction of other facility buildings, slum improvement and maintenance of colonies, etc. for which there should have been separate agencies. Consequently, the organisational structure of the DDA has grown immensely employing more than a lakh people. Broadly, it has the following divisions—(i) Planning, with three Directors—Director of Development Control and Building, Director of City Planning, Director of Perspective Planning; (ii) Architecture; (iii) Engineering, (iv) Housing, (v) Land Department, (vi) Horticulture, (vii) Finance Department, (viii) Co-operative Societies Department, (ix) Vigilance Department, (x) Lottery Department, (xi) Legal Department, (xii) Public Relations Department (xiii) Welfare Department, and (xiv) Slum Improvement Department. One of the biggest problems of DDA is facing is related to the inter-departmental and inter-agency relationship. Its main source of revenue is the sale/auction of land and land-leased rent.

5.2.2 Calcutta Metropolitan Development Authority (CMDA)—Calcutta Metropolitan Area (CMA) was reported to have a population of 10.2 million in 1981. Its total area is large (1425 sq. km.) and is spread on both sides of the river Hooghli. CMA is comprised of three Municipal Corporations. 31 Municipalities, and a number of semi-urban and rural 'mouzas' extending over five districts surrounding the metropolitan core.

After partition of India, Calcutta received a huge influx of refugees from across the border. This resulted in the breakdown of social as well as physical infrastructure in the city. The state of affairs continued for a long time until a World Health Organisation report brought into focus the poor state of civic amenities in Calcutta. The State government took note of the report and created Calcutta Metropolitan Planning Organisation (CMPO) in 1960 for planning and development of Calcutta Metropolitan Area. In 1966, CMPO published the Basic Development Plan for Calcutta, 1966-86.

The Calcutta Metropolitan Development Authority (CMDA) was set up in September 1970 to undertake implementation of Basic Development Plan (BDP) for Calcutta. Thereafter, Calcutta Urban Development Project (CUDP-I) was prepared extracting the projects identified in BDP at an envisaged cost of Rs. 150 crore. The World Bank with its associate, the International Development Agency (IDA) provided credit

of \$ 35 million at this stage. Under the CUDP-I, CMDA mainly acted in the beginning, as a funding and monitoring agency for various projects.

Calcutta Urban Development Project-II (1977-83) for the first time ventured a systematic planning approach for development of Calcutta and its surroundings. CUDP-II envisaged an investment of Rs. 278 crore including IDA Credit of \$ 87 million. Now CMDA emerged for the first time as an Executive Agency. The 51 projects undertaken under this package covered various aspects of civic life e.g. water supply, sewerage and drainage, traffic and transportation, solid waste management, bustee improvement, health care, primary school and environmental hygiene. Besides, this a programme of site and services for economically weaker sections of the society was also started. In order to decentralise the use of funds away from the metro-core, a programme for municipal and Anchal development was initiated.

The proposed outlay for CUDP-III (1983-88) is Rs. 340 crore including an ideal credit element of \$ 147 million. The first task of CUDP-III was envisaged to optimise the benefits out of the projects undertaken during CUDP-I and CUDP-II. It was also aimed at spatial distribution of investment for correcting the imbalance between highly urban Calcutta-Howrah complex and semi-urban and rural peripheries within Calcutta Metropolitan Area. Public participation is achieved through the process of implementing the projects by the local bodies.

Under the West Bengal Town and Country (Planning & Development) Act, 1979, CMDA was declared as a Development Authority within the Calcutta Metropolitan Planning Area in 1982. With this declaration, a new dimension was added to the activities of CMDA as it was charged with the responsibilities to prepare a land use map, prepare and enforce an outline Development Plan and a Detailed Development Plan, prescribing use of land, and prepare and execute development schemes.

Since 1982 land use maps and land registers have already been published for about one-third of CMA area. Nine Outline Development Plans (ODP) for various parts of CMA have been prepared. ODPs for other areas are under various stages of preparation. In addition to this, a Task Force is engaged in preparing a Perspective Plan for Calcutta, 2001 A.D. for CMA. It is hoped that this Perspective plan when approved shall become CMDA's guideline in identification of sectoral development schemes to be taken up under CUDP packages in future.

During the interim period CMDA has initiated certain conditions to regulate the development permission within the CMDA area for controlling the haphazard growth. Powers have been delegated to the local authorities within CMA to grant development permission subject to certain conditions along with the powers to enforce the conditions.

The major works carried out by the CMDA can be classified as (a) Municipal Development Programmes; and (b) Bustee Improvement Programmes.

Currently, the developmental works are lagging behind because the statutory Development Plan is still under preparation. The priority works in CMDA at the moment are the works related to implementation of Ganga Action Plan (GAP).

Since its existence, CMDA has undertaken a number of projects concerning various aspects of urban development, namely, (a) a number of projects all over CMA related to water supply schemes, (b) sewerage and drainage schemes, (c) solid waste management, (d) traffic and transportation, (e) shelter, area development and urban renewal, (f) bustee improvement, (g) municipal and anchal development, (h) environmental hygiene programme, (i) municipal development programmes, and (j) panchayat development programme.

There are few other programmes undertaken by CMDA namely, (k) primary school programme, (l) health care activities, (m) parks and playgrounds, (n) small scale entrepreneurs programmes, (o) cattle resettlements schemes, (p) gas distribution schemes, and (q) Ganga Action Plan projects—the latest priority of CMDA.

The chairman of CMDA is the Chief Minister of the State. The Vice-Chairman of CMDA is the Minister for Urban Development in the West Bengal government. The next in hierarchy is the Chief Executive Officer (CEO) from the Indian Administrative Service who is assisted by a Secretary, CMDA, who also belongs to IAS cadre. The technical directorate of CMDA is headed by a Director-General (Planning and Development) and a Chief Physical Planner. Under each of these two officers, town and country planners are appointed at the levels of Additional Director of Planning, Deputy Director of Planning, Associate Planners and Assistant Town Planners. Besides, there is an Urban Economist at the level of Deputy Director, supported by Economic Planners and Social Planners. Director General (Planning and Development) is also supported by the services of Traffic Engineers besides qualified town planners and transport planners.

5.2.3 Madras Metropolitan Development Authority (MMDA)—This organisation is headed by a Vice-Chairman who is a member of the Indian Administrative Service. He is assisted in the day-to-day administration of the organisation by a Member-Secretary, who also belongs to the IAS Cadre. The main function of the organisation is to regulate the development (issue of planning permission) within Madras Metropolitan Area. The Authority has also taken up projects to develop new towns in the Madras Metropolitan Area so as to divert migration streams away from the Madras city to the new towns being developed as alternative growth nodes. In the same vein, the Authority is trying to decongest the city by constructing wholesale markets and truck terminals in the peripheral areas so that the existing ones in the congested locations within the city can be shifted out. Besides the above functions, the Authority is involved in improving amenities through undertaking expansion programmes of water-supply, sewerage, drainage and transportation networks. The main functions of the Authority are those of preparation of revised master plan when necessitated and preparation of detailed development plans for areas covered by the Madras Metropolitan Area.

Whereas the Authority was created for the basic planning and development works as mentioned above, it has over the years enlarged its functions by taking up the task of improvement of slums through improved amenities. This work is being done with the help of World Bank assistance. In fact, the scope and content of World Bank assisted schemes has increased so considerably during the last decade that the Authority has created a separate wing for World Bank Schemes. The Authority has undertaken a variety of World Bank assisted schemes in the areas of bus fleet financing, road improvement, comprehensive traffic and transportation studies, water-supply and sewerage schemes and various employment generation schemes. Again, with the help of World Bank assistance, the Authority has taken up Sites and Services Schemes in areas within its jurisdiction. The Town Planning Directorate is formulating and implementing Sites and Services Schemes for area outside the jurisdiction of the Madras Metropolitan Development Authority.

During the next five years of planning period, besides continuing with the implementation of the existing tasks in hand, the priority works to be undertaken are those of revising the Master Plan of Madras Metropolitan Area; preparation of sectoral plans for housing, transportation studies; and plans for six urban nodes within the Madras Metropolitan Area.

For the above works, the Authority is organised in three separate wings, each headed by a Town Planner.

The three wings are for (i) Preparation of Area Plans; (ii) Undertaking World Bank Schemes; and (iii) a project office to look after the development of new towns, designated as growth nodes.

The Authority was created in 1965. During the period 1977 to 1981 Madras Urban Development Project was implemented through the various schemes as mentioned above. Since 1981, the second phase of the above project is under implementation. The project office was created in 1975 and the World Bank Scheme Wing was constituted in 1977.

The Master Plan was approved in 1975, but the structure plan for Madras Metropolitan Areas was prepared during 1978-80. The Structure Plan is yet to be approved by the State Government and hence is yet to be enforced.

The Authority gets the necessary statutory backing from the following Acts for the various functions it has to perform :—

- (i) Town and Country Planning Act, 1971;
- (ii) Urban Land (Ceiling and Regulation) Act, 1976;
- (iii) Land Acquisition Act, 1894 as amended in 1986;
- (iv) Housing Board Act;
- (v) Slum Clearance Act;
- (vi) Tamil Nadu District Municipalities Act, 1920;
- (vii) Tamil Nadu Panchayat's Act, 1920;
- (viii) Madras City Municipal Corporation Act, 1919; and
- (ix) Parks and Play-fields Act.

In addition to the above, the Authority has to consult development control rules framed by MMDA. It also refers, inter-alia, the National Building Code framed by the Indian Standards Institution.

The major problems being faced by the Authority are in the area of land acquisition; as stated acquisition processes are quite lengthy. In fact the Authority is forced to restrict its development activities to the area that had already been acquired by the Housing Board. As such, a kind of working relationship has been established between the Madras Metropolitan Development Authority and the Housing Board. The Authority prepares the detailed development plans, Housing Board prepares the layout plans and once these plans are sanctioned by the Madras Metropolitan Development Authority, the same are implemented by the Housing Board.

The other problem is in the area of mobilising finance. Since the Authority is unable to acquire more land, it is finding it increasingly difficult to embark on resource generating projects. Lack of coordinating between various departments such as those of education health, etc., in developing the relevant facility areas is another lacuna in the existing development process.

Inability to enforce development controls is in fact an omnipresent problem. The planners in the development authority also feel that the enforcement problems arose because of lack of power in the hands of planner and low status enjoyed by the planners' profession vis-a-vis other professionals and bureaucrats. The planners feel that if they are to be successful, they have to be given more powers to acquire land and prosecute the people who violate development controls rules. The planners also feel that in metropolitan areas, the local governments should operate within an overall metropolitan government system and release of funds by the metropolitan agency.

The other aspect to be looked into are those of regulating private development through public intervention. In this regard it is pointed out by planners that a kind of development control process is to be evolved to see that the controls do not get bogged down in too many details.

Planners will have to recognise that cities develop over a period of time influenced by many compulsive factors and it will be expecting too much out of development controls if they are required to give a shape to cities strictly as visualised by planners. As such, zoning is to be only for overall rather than detailed enforcement. The aim of the planners should be to achieve a workable city. They are to see that areas to be developed by governmental agencies are developed as per the plan. Housing and infrastructure are taken care of as per the demands in the short run as well as in the long run. Cities develop as they like to develop and planners can bring about only marginal changes. The development controls require to be framed keeping this perspective in view. As far as possible, a planner should seek the help of group of people and evolve collective decision-making.

5.3 Operational Issues of Planning and Development Organisations

A host of organisations pertaining to urban planning and development exist at national, state, regional and local levels. A perusal of tables 5.1 to 5.5

clearly reveals that several organisations have overlapping functions which often result in confusion and delay. The maximum amount of conflict is observed between those of improvement trusts where they exist and of municipalities. In some places, the improvement trusts have been abolished and their activities are performed by municipal corporations : at others they have been replaced by development authorities. However, in Calcutta Metropolitan Districts unique situation has arisen where the Howrah Improvement Trust exist side by side with Calcutta Metropolitan Development Authority. Similar kind of conflicts is now observed between the Housing Boards and the Town Planning Departments. These conflicts get accentuated where housing boards are raising funds through HUDCO for implementation of their projects. The Housing and Urban Development Corporation as the funding agency is working in a conflicting manner, resulting in delay in the implementation of the projects. The local governments which are, in some states, the frontal agencies for getting the urban area plans prepared and enforced in their area of jurisdiction are beset by problems of finance, administration and organisation. The situation is made worse by the fragmentation of local governments particularly in metropolitan areas. Conflicts arise not only due to various local governments within the metropolitan area but also between the local governments and area-wide development authorities which have now been created in a large number of cities and towns.

There is no doubt that the system of urban government in India needs a thorough reorganisation to cope with the ever-increasing complexity of urban problems and widening scope of urban planning and development authorities. The state town planning departments are now equipped with qualified staff in most of the states, barring a few, such as these of Uttar Pradesh and Rajasthan. But one of the major lacunae in the administrative organisation of the state town planning departments is that in some status like Tamil Nadu, the Directorate is headed by an administrative officer. So is the situation in almost all the urban and regional development authorities. This discrepancy in the functioning of urban planning and development organisations at the state and local levels needs to be removed.

The special purpose organisations such as the housing boards and slum clearance boards face problems in co-ordinating their activities with the state town planning departments because of a lack of qualified town planning staff, and where the staff is in place, it is accorded such a low status that the town planner is not in a position to perform the town planning responsibilities because of undue inter-

ference from superior officers who are not town planners. In such a situation, the state town planning departments are not prepared to delegate their authority to the town planner appointed by the special purpose organisations. It is, therefore, necessary that the status and the cadre of the town planners in the local authorities entrusted with substantial town planning responsibilities should be strengthened.

5.4 Issues for Planning and Development of Organisations in the future

Extending and sequence in the evolving scope and content of urban planning in India, it is already accepted that the country should have a National Settlements Policy. An action has already been initiated to evolve a National Urbanisation Policy for which a National Commission on Urbanisation has been set up. It is hoped that the Commission will come up with specific recommendations that will result in a balanced and integrated urban development of the country. It is also expected that the Commission will provide a framework for detailing out a system of organisations and policies for an integrated planning approach for urban development at national, state and settlement levels. Recent trends in urban planning practice have truly emphasised the need for an indigenous approach that will give our urban areas a specific form and will relate to our cultural heritage, changing economic characteristics and physical environment. Creation of bodies like the National Ganga Authority, the National Wastelands Boards, and agencies for conservation of resources, areas and symbols representing our cultural heritages and emphasizing the need for increasing the aesthetic content of our natural and built land scape (such as Archaeological Survey of India and the Indian National Trust for Art and Cultural Heritage) point towards a future where organisations related to urban planning will have to re-orient themselves to the changing requirements.

5.5 Conclusions

Genesis of the present problem of multiplicity of authorities lies, way back, in the step taken during the British period when improvement trusts were created for carrying out capital development works, denying the municipalities the role that essentially belonged to them. This was a political move initiated mainly to serve colonial interests. Unfortunately, even after the Independence, the process of balkanisation of existing agencies and creating new ones ostensibly for special purposes has continued unabated.

Now, there are a host of agencies involved in urban planning and development at local, state and central

levels, sometimes with conflicting interests and working at cross-purpose. The local governments which could become a powerful third tier (state and central being the other two) working at grass-roots and moulding aspirations and objectives of the people into concrete shapes, are still kept weak and quite often superseded. Even those agencies which are thriving and active are relegated in the background by restricting their functions to maintenance of developed areas thrust on to them by the increasingly omnipresent development authorities.

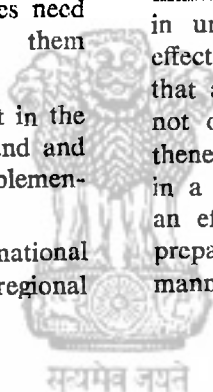
Time has perhaps come when a serious effort has to be made towards a thorough reorganisation of agencies involved in the development process. There is a crying need to eliminate overlapping functions and to make the agencies play complimentary rather than conflicting roles. The role of local governments in plan preparation and plan implementation has to be consciously evaluated and if they are identified as potential nodal agencies for development purposes in towns and cities in the changed socio-economic and political environment of the country, then the necessary fiscal, institutional and legislative measures need to be taken to strengthen them and make them purposeful.

The concept of multi-tiered local government in the context of metropolitan cities seems to be sound and needs to be examined in detail for implementation.

In spite of the increasing emphasis in the national Five Year Plans on the goal of a balanced regional

development in the country, no serious effort has been made towards regionalisation and institution of regional development agencies other than those created piecemeal to look after special regions. The present strategic compulsions of achieving a balanced social and economic development, make it imperative on the part of the policy-makers to give more serious considerations to regional dimensions of planning and development and create necessary legislative and institutional apparatuses for achieving the goal of balanced regional development in the country.

Whereas, Town Planning Departments/Directorates, which have been established in almost all the States, are by a large, well-equipped by trained town planning personnel, the same cannot be said about other agencies such as Development Authorities Housing Boards, Municipalities and Slum Improvement Boards. The cadre of town planning personnel in these agencies, if it at all exists, is extremely weak and unable to play its professional role in a forceful manner, in spite of the increasing role of these agencies in urban improvement and development. For the effective-reorganisation of these agencies, it is necessary that adequate cadres of town planning personnel are not only established where non-existent and strengthened where weak but also the town planner placed in a position of authority wherefrom he can play an effective decision-making and managerial role in preparing and implementing plans in a professional manner.



Observations and Recommendations of Various Committees on Urban Planning Matters

Several important committees were appointed in the past by Central as well as State Governments to advise on specific problems. The observation and recommendations of these Committees have been providing ideas for new directions in urban planning in India. In this chapter, observations and recommendations of nine such Committees (five appointed by the Central Government and four by State Governments) are presented.

Evolution of urban planning in the post-independent period has been to a very large extent influenced by the decisions and resolutions in the annual meeting of the Ministers for Local Self-Government, State Ministers for Town and Country Planning, and the Chief Town and Country Planners of the States. These meetings are held in different parts of the country to review the town and country planning situations, needs and possibilities. The meetings started from the year 1960. For example, the Minister's meet at Calcutta in 1962 resolved for the following :

- (i) Need for a policy of interim measures for controlled and direct urban development in the cities and towns in India;
- (ii) Preparation of plans on regional basis;
- (iii) Improvement of fiscal planning as an ingredient of the master planning functions;
- (iv) Legislation for regional planning;
- (v) Model Town and Country Planning Act;
- (vi) Opening planning schools for training of urban and regional planners; and setting up a committee to study rural-urban relationships;
- (vii) Rural-urban relationship.

Moving with the progress in urban planning, the conference of State Ministers of Housing and Urban Development and Town Planning, held in 1973, passed the following resolutions :

- (i) The states which did not have comprehensive town country planning act should take steps to enact one with the help of the TCPO, New Delhi, within one year;
- (ii) States should take steps for enforcement and implementation of development plans prepared during the Third Plan period. In this regard states should complete the preparation of city development programmes for urban areas where a development plan is ready and integrate the city development programme with the annual plans of the States.
- (iii) The Conference appreciated the importance of generating resources from urban land by mopping up the unearned increments in land values, levying conversion charges for more remunerative uses of land, etc., and recommend that the resources so generated should be used by the State specifically for urban development.

Apart from the mobilisation of the resources by the States themselves, the Conference also recommended that the Central Government could provide the initial capital to be operated as a "revolving fund" for financing all urban development schemes including acquisition of land. The conference made special references to States such as Nagaland where there were no major urban settlements and recommended that the revolving fund should cover remunerative schemes in areas for which development plans had been prepared.

The Conference also recommended that the State Government should encourage the local bodies within their jurisdiction, to take up remunerative projects such as

markets, cinema theatres, hotels, etc. which will generate resources for financing urban renewal and urban development schemes.

The Conference also noted that the recommendations embodied in the Report of the Committee of Ministers in regard to employing town planners and creating posts in town planning, departments had not been implemented by some of the States. The conference, therefore, recommended special steps to be taken for expeditious implementation of these recommendations.

- (iv) It noted the difficulties encountered by the State Govts. in the implementation of development plans and recommended that the departments of the Central Government could be requested to extend full co-operation to the State Governments in so far as lands falling under their jurisdiction were concerned.
- (v) It accepted the desirability of having a physical plan for the State as a whole to definitely pinpoint potential growth centres to ensure balanced distribution of population and economic activity in the urban as well as rural areas of the state.
- (vi) It recommended the setting up of a special fund for financing the implementation of inter-state regional plans, besides the state plans.
- (vii) It was of the opinion that the methods and techniques of plan preparation, suitable for Indian conditions, were yet to be evolved and there was a necessity for continuous research in the field of urban and regional planning.
- (viii) The Conference felt strongly about strengthening the planning and development agencies for the availability of expertise, specially for housing and transportation which were emerging as new major works of development.

Improving over the emerging problems in time, the central council of Local Self-Government and Urban Development resolved at a joint annual meeting with the Executive Committee of All India Council of Mayors, held in New Delhi, in October, 1986 :

- (i) Resolved that the Government of India be urged to refer the question of devolution of adequate share of resources to the Municipal Bodies from out of the Central and

State taxes and duties to the 9th Finance Commission by the inclusion of this subject as a specific term of reference. In this connection, the meeting was of the unanimous view that the Municipal Bodies have a legitimate claim to a share of the Corporation Tax as the functioning of the Corporate Sector is facilitated by the infrastructure developed and services extended by the Municipal Bodies in the urban areas.

- (ii) Further resolved that the Government of India should urge upon the State Governments to set up the Municipal Finance Commission/Boards wherever these have not been set up and to activate their functioning wherever these have been set up, so as to ensure adequate flow of funds to the Municipal Bodies.
- (iii) Further resolved that pending a reference to and recommendation by the 9th Finance Commission, the Government of India and the State Governments be urged to ensure that adequate share is given to the Municipal Bodies from such taxes as Motor Vehicles Tax, Entertainment Tax, Excise Duty, Tax on Railway Passengers and similar other taxes and levies.
- (iv) Further resolved that considering that the Octroi has been traditionally the main financial base of Municipal Bodies and is the only elastic source of revenue and of liquid funds for them, it is strongly urged upon the Central Govt. and the State Govts. that with a view to preserving the financial autonomy of Municipal Bodies, Octroi should not be abolished and wherever it has been abolished it should be reimposed.
- (v) Further resolved that—

Whereas tax on professions, trades, callings and employments is a traditional local tax and whereas a limit of Rs. 250/- has been fixed in case of this tax and,

Whereas this limit originally fixed has become very low and anachronistic in view of the erosion in the value of money and,

Whereas no such limit is placed on any other tax in the Constitution of India and,

Whereas the Municipal Bodies are in urgent need of mobilising additional resources for development works,

The council urges on the Government of India to take immediate measures to amend the relevant laws to do away with the ceiling limit of the aforesaid tax.

- (vi) Further resolved that considering the urgency of meeting the financial needs of Municipal Bodies for implementing various pressing schemes of Urban Development, Water Supply, Sewerage, etc. it be strongly urged upon the Central Government to set up the National Urban Development Bank at the earliest.
- (vii) Resolved that the Scheme of grant of bank loans to the urban poor for self employment should be operated in consultation with the Urban Development Departments of the State Governments and Municipal Bodies so as to ensure its effective implementation.
- (viii) Having taken note of the fact that the Government of India has appointed a High Powered National Commission on Urbanisation (Correa Commission) to make comprehensive recommendations relating to various aspects of Urban Development including the complex problem of rapidly growing urban slums,

Resolved that, pending the submission of the Report by the Commission, the existing rate of per capita grant of Rs. 300/- under the Environmental Improvement of Urban Slums Scheme be immediately raised to a substantial extent (at least Rs. 500/-) so as to make the scheme effective and to ensure that the basic minimum facilities are provided to the slum dwellers.

- (ix) Resolved that the Central and State Governments be urged to make suitable amendments in the Constitution of India and the relevant laws to enable the levy of property tax on the Central/State Government properties by the Municipal Bodies.
- (x) Considering that owing to the rapid increase in population of municipal cities and towns, the Municipal Bodies are finding it extremely difficult to provide primary education facilities.

Resolved that adequate grants be given to them to enable them to meet their mounting expenditure on primary education.

- (xi) On expressing deep concern on the supersession and dissolution of Municipal Bodies

and noting that in spite of resolutions passed on the earlier meetings the position has not improved,

Resolved that the Central Government and State Governments be urged to ensure the holding of elections to the Municipal Bodies regularly and that supersession and dissolution is not resorted to except on strong, valid and legitimate grounds and in the exceptional event of any Municipal Body being superseded, election to such body is held within a period not exceeding one year.

- (xii) Having noted the fact that during the Seventh Five Year Plan period only 102 towns have been proposed to be covered by the Integrated Development of Small and Medium Towns scheme as against 235 towns covered during the Sixth Five Year Plan period,

Resolved that it should be urged upon the Central Government to include at least 235 towns during the VII Five Year Plan period, if necessary by providing additional funds for the scheme at the time of the mid-term review of the VII Five Year Plan.

6.1 Health Survey and Development Committee (Bhore Committee) 1946.

The Committee was appointed by the Government of India in October, 1943 under the Chairmanship of Sir Joseph Bhore. Though the main task for which the Committee was set up was to do a broad survey of health conditions and health organisations in British India, it also made recommendations on village and town planning. These recommendations were of far-reaching importance as they set the line of thinking at government level, both Central and State, in regard to undertaking regional and urban planning in post-war years right upto the end of the First Five Year Plan.

Some of the most important recommendations of the Committee are stated below :

- (i) A Ministry of Housing and Town Planning should be created in each province so as to extend the kind of attention the subject demanded.
- (ii) A Directorate of Town Planning should be established in each province with a technical expert as its advisor, who may be called the Director of Town and Village Planning. The Director would be mainly

responsible for technical scrutiny of all town planning schemes.

- (iii) A Central Directorate of Town and Village Planning should be created so as to function as an information bureau for town planners throughout the country. A town planning expert should be appointed in the Central Ministry of Health to scrutinise requests from provinces for financial support from the Centre in respect of their town and country planning schemes and advise various departments of the government on town planning matters.
- (iv) A model legislative act, incorporating all the modern concepts regarding town and village planning, should be drawn up by the central government and adopted by all provinces.
- (v) Improvement trusts should be established in all the larger cities of the country for dealing with slum clearance and rehousing problems. Every trust should be required to employ a town planner on its staff.
- (vi) In other urban areas district health boards should be responsible for urban planning and should be required to maintain on its establishment a trained town planner.
- (vii) Layouts of new villages which may be established as a result of developments in industry, mining or agriculture, should be prepared by the provincial Director of Town Planning.
- (viii) The haphazard location of industries in inhabited areas must be controlled by proper legislation. A provision for controlling the location of industry should be made in the proposed model legislation for town and village planning. The layout for a new industrial area should essentially provide for residential areas for industrial workers and the layout should be approved by the Ministry of Housing and Town and Village Planning.
- (ix) Certain number of selected individuals should be sent to Europe for training in town planning. Town Planning experts from abroad should, if necessary, be recruited on short term contracts and training centres should be set up at least in few universities in the country.

Although this Committee was appointed during the last years of the British rule, some of its fundamental suggestions are valid even today and many have

already been implemented. A Ministry of Urban Development is already functioning at the Centre. The Central Town and Country Planning Organisation, headed by the Chief Planner, has been actively performing the advisory role in the country. Institutions imparting training and education in town planning are now well established. Directorates of Town Planning have been created in almost all the states.

6.2 Madras Provincial Town Planning Enquiry Committee, 1949

The main concern of this committee was to evolve measures for expeditious preparation, approval and execution of all town planning schemes. For this purpose, if required, it was to suggest amendments to the Madras Town Planning Act, 1920, and reorganisation of existing town planning departments, both under the Govt. and under the municipal councils. One of the important concerns of the Committee was to find ways and means of financing town planning schemes.

The Committee examined in extensive details rules and procedures regarding plan-making, plan implementation and legal backing as emanated from the Act of 1920.

Some of the major recommendations are reported here for ready reference :

- (i) Consistent with the need for particular procedures, rules, should be modified suitably to expedite preparation, sanction and publication of schemes, so that the procedure can be completed within the recommended period.
- (ii) Larger areas for which schemes are necessary might very well be split up into smaller units and a scheme prepared for each unit separately, but having regard to the co-ordinated development of larger area. It was suggested that about 150 acres would be a proper area for a detailed scheme.
- (iii) Local planning authority should be able to prepare and publish a draft scheme within 12 months and it should also be possible to finalise, and submit the scheme to Government for sanction within a similar period of 12 months.
- (iv) Every local planning authority should also take up preparation of various other types of improvement schemes for slum clearance, improvement of insanitary areas, redevelopment, zoning, development of garden cities and garden suburbs, housing

and rehousing, road improvement and other purposes. These schemes should be prepared under the provision of town planning act, which will have to be amended suitably to ensure co-ordinated planning.

- (v) Uniform provision be made both for urban and rural areas and the act should be made into a Town and Country Planning Act. To plan the development and improvement of villages, a regional outlook is essential.

It should be advisable to have as many provisions as concern town planning incorporated in the town planning act itself, particularly matters related to street control, building regulations, approval of layouts, and other provisions of similar nature. Provisions such as structural requirements, and sanitary and fire resistance requirements may be embodied in the concerned municipal act.

- (vi) Regarding ribbon development, the provisions relating to the erection of buildings and townships and the creation of planning boards for regulating and controlling them—contemplated in Highway Bill—should all be incorporated in the town planning act.
- (vii) There should be an acceleration in the preparation and approval of General, Joint and Regional Planning Schemes, specially providing for development of industries and the housing of industrial labour on the lines of "Garden Cities", "Suburban Towns", Satellite Towns and "Trading Estates".

Besides the above, there were detailed recommendations on :

- (a) Interim development controls and enforcement of schemes.
- (b) Execution of schemes and compensation of injurious affection and land acquisition.
- (c) Betterment contributions, arbitration and finance.
- (d) Creation of a Ministry and a Board of Town and Country Planning and Housing;
- (e) Provincial and local departmental organisation.

The report submitted by the Enquiry Committee is one of the most complete documents detailing out procedures for various aspects of plan making and imple-

mentation. It has suggested built-in checks and balances in effectuating the plan proposals. The committee has deliberated upon the measures of organising the technical departments at the state and local levels to undertake the task of urban planning including plan implementation. Most of the suggestions made in this report have been instrumental in establishing the Town and Country Planning Organisation in the State.

6.3 Committee on Development of Small Towns in Hill and Border Areas, 1963

The Committee was appointed by the Central Council of the Local Self-Government at the fourth conference of the State Ministers for Town Planning in 1963. The work was carried out and presented in a printed book form under the patronage of the Ministry of Health, Government of India. The work covered a review of the general setting of the hill towns highlighting various socio-economic and physical characteristics, problems of hill towns, and the conclusions. The summary of conclusions and recommendations of the Committee are as follows :

General

- The small towns in hill and border areas suffer from a triple handicap. They are not only backward in themselves but happen to be located in relatively backward regions. Most of the states in which the hill areas form a large proportion of land and population are also relatively less better off. Backwardness is writ large in almost every aspect of their socio-economic conditions.
- The problem of hill and border towns cannot be treated in isolation. Any attempt to raise the hill towns without a similar corresponding effort in their hinterlands and wider regions will be artificial and they will not be able to sustain the momentum given to them initially. Their development has, therefore, to be an integral part of a larger programme for the overall development of the hill regions themselves and the problem has to be tackled with utmost inter-departmental collaboration, co-ordination and understanding.

Regional Plans for Hill Areas

- There is need to formulate economic development plans and programmes for the hill and border areas as distinct regional plans which are bold in conception, of higher urgency in terms of priority and more liberal

in the matter of financial and technical assistance from the Central and State Governments. A programme like the one which the Planning Commission's Team actually drew up for the backward eastern region of U.P. should be formulated for the hill areas after a thorough study of their problems, resources and potentialities. In the regional plans there should be a proper integration of economic and physical (land-use) planning.

- In the context of the Chinese aggression and our strained relations with Pakistan the question of over-all development of the hill and border areas and their small towns assumes the full character and urgency of a national problem. This consideration makes the development of hill regions and their small towns as much of a defence problem as it is a socio-economic one. The defence effort should therefore, be co-ordinated with economic development.

Urbanisation

- Not only should there be co-ordination in the planning and development of Cantonments with the civil townships, but public utility services and community facilities should also be jointly conceived, executed and operated. The cost of joint services may be shared, in accordance with mutually agreed formulas. In such co-ordinated efforts the defence considerations should naturally have an over-riding priority.
- To tackle the problem of urbanisation it is vital that the urban areas are prepared well in advance. The urban areas should be suitably selected for the location of appropriate industrial, commercial and other economic activities to lend them a measure of occupational balance.

Master Plans

- Advance preparation for the anticipated urbanisation must begin with the preparation of master plans. For preparation of master plans, the Centrally sponsored Scheme of giving 100 per cent grant should be extended to the small hill towns.
- The concerned State Government may give special allowance to attract overseers for preparation of base maps.
- Besides preparing Master Plans for the hill towns, it is necessary to prepare town develop-

ment programmes on the line of those envisaged by the Planning Commission for the bigger cities. These should be made an integral part of the regional plans suggested earlier and the State Five Years Plans. The State Governments may seek the assistance of the Central Town and Country Planning Organisation in preparing town development programmes.

Water Supply, Sewerage and Drainage

- Separate Engineering Survey and Investigation Units should be created to survey problems of water supply, sewerage and drainage of the small towns. Where such units exist, these should be augmented and strengthened to cover these small towns on a priority basis. State Governments should appoint Regional Water and Sewerage Boards to look after the establishment and maintenance of these services in small towns. The financial and material requirements of such programmes should be worked out in advance.
- The National Water Supply and Sanitation Scheme should cover, besides the pilgrim centres, "tourist centres and small towns in the hill and border areas". In case of these small towns, the pattern of assistance may be the same as the one approved by Planning Commission for rural areas from time to time. The Scheme applicable to small towns in hill and border areas should be a Centrally sponsored one. So far as tribal areas are concerned the existing pattern of Central assistance should continue.

Health

- For improving the health facilities in the hill towns, existing standards of hospital and dispensary facilities should be raised. Specialised services should be made available for treatment of diseases prevalent in the hill areas.
- With a view to evolve necessary measures for the prevention and cure of the diseases prevailing in the hill areas, it is necessary to collect correct data in respect of these diseases. The Ministry of Health may arrange to carry out special surveys to determine the prevalence of various diseases.
- Health education and social education should be provided through the community development blocks in rural areas and the civic authorities in urban areas.

Social Reforms and Social Welfare

- The Central and the State Government Organisations or departments concerned with the welfare of the scheduled castes and scheduled tribes should organise special intensive reform and welfare programmes in the hill and tribal areas on a priority basis.

Internal Roads

- In the case of town area and notified area committees matching contribution against grants given for roads should not be insisted upon. Even in regard to the small municipalities the grants may be given on the basis of 25 per cent as against 100 per cent matching which is the practice at present.

Housing

- With a view to improve the housing conditions, the terms and conditions of the Slum Improvement Scheme of Government of India should be liberalised to cover small hill towns also. The hill towns should be given priority in the matter of grant of loans under the various Housing Schemes.
- Research work to find out cheaper building materials, and methods of construction should be undertaken by the National Buildings Organisation on a priority basis. The building materials should be exempted from taxes by the local bodies. The State Government should also earmark special quotas of these commodities for the hill areas and hill towns.

Sanitation

- One of the urgent requirements is to convert dry latrines into flush latrines wherever, water-borne sewerage systems exist. Construction of inexpensive hand flushed latrines designed by the Government of Uttar Pradesh should be encouraged. House-owners in the low income group should be given loans recoverable in easy instalments to undertake such constructions.
- Where water-borne sewerage system does not exist, frequency of scavenging services should be increased and the staff therefor augmented suitably. Hand flushed pit type latrines should also be encouraged wherever, possible. To enable the local bodies to meet the additional expenditure on these, the State Government should provide liberal grants.

Tourism

- Hill towns offer immense potentialities for tourist trade. A tourist traffic promotion programme on a big scale may be launched for the benefit of the hill towns.
- Adequate residential accommodation to suit persons in different income groups should be created. Games and sports, cultural, and literary programmes, conducted tours and shikar parties, etc. should also be organised as a part of a co-ordinated overall programme for the development of tourism. The public and private organisations concerned should form committees to chalk out concrete programmes. The tourist bureaus of the State Governments in the hill towns should be strengthened. Well-organised publicity campaigns are also necessary.
- Tourist facilities should not be concentrated in the larger hill towns but also extended in an increased measure to smaller ones so that they may have a chance to grow quickly. Special efforts should also be made to popularise them.

Administration

- Out-moded revenue systems like Zamindari still persist in many hill areas. The need to introduce land reforms in hill areas is urgent for raising the productivity of land. Those States where land reform laws have not yet been passed or passed but not effectively enforced should take necessary steps in this direction at an early date.
- Cadastral Surveys of the hill areas should be carried out quickly and steps taken to convert 'non-reporting areas' into 'reporting areas'.
- In many hill areas the revenue officials are performing police functions also. A separate police department should be created as distinct from the revenue department, as it will be conducive in promoting better security so essential for prosperity and even to help tourism.
- The size of the 'patti' should be reduced to enable the 'Patwari' to function efficiently.
- A special central pool of officers should be constituted for the hill areas particularly for the staff employed in agriculture, horticulture, engineering, soil conservation, forestry and animal husbandry and given a special allowance if posted in the hill areas of the States and territories concerned.

- The State Government could as well make it compulsory for officers in administrative land technical cadres to serve in the hill and border areas for at least a term of three years, before they could be considered eligible for promotion.
- The long-term solution of the personnel problem lies in building up local talent. The concerned State Governments should follow a policy of selecting promising young-men belonging to hill and tribal areas for award of scholarship for higher studies. They should also explore possibilities of reserving some quota in the technical institutions within and outside their own States for students hailing from the hill and border areas.
- A separate senior officer under the Development Commissioner should be appointed by State Governments to look after the implementation of the Five Year Plans and programmes in the hill areas.
- A special officer should be appointed by the State Governments in the L.S.G. Departments for guiding, advising and directing the local bodies of the hill and border areas. This officer should ensure that areas classified as urban by the Census authorities have urban local bodies established for them. These urban local bodies should be given adequate financial assistance during the first few years. Efforts should also be made to strengthen the revenue structure of these urban local bodies.

6.4 Committee on Urban Land Policy, Ministry of Health, Government of India, 1965

This Committee was appointed by the Central Council of Local Self-Govt. and Town Planning Minister's Conference in 1964 under the chairmanship of Mr. S. M. Fazlur Rahman, Minister for Local Self-Government, West Bengal. The report was submitted to the Ministry of Health, Government of India, for action, as Urban Planning was under the jurisdiction of this Ministry.

The Committee was appointed as a need was felt for a long-term urban land policy, encompassing co-ordinated legislative, administrative, financial and planning measures to take care of problems related to acquisition, development, distribution and use of land. Relatively low per capita land availability in India and conversion of good agricultural land into urbanised areas are the compelling circumstances for

optimal utilisation of land. Basic objectives of urban land in India have to be to make the right amount of land available at the right time and at reasonable prices to both public authorities and individuals and not let concentration of land ownership in few private hands, thereby safeguarding the interests of the poor and under-privileged sections of urban society.

The salient recommendations of the Committee are listed below :

- (i) Effective public control should be exercised over land through large-scale public acquisition, rational and equitable compensation policy, preventing speculation in land, positive encouragement to bonafide builders and co-operatives, and sympathetic treatment to poor and vulnerable sections of society.
- (ii) The Union Government should extend liberal financial help to the State Government and local authorities not only for the preparation but also for the implementation of master plans.
- (iii) The State Governments should have a town planning law based on modern scientific concepts of planning.
- (iv) To ensure implementation of master plans, a capital improvement plan and a fiscal plan should be prepared simultaneously with the land use plan.
- (v) Zoning and sub-division regulations should be prepared and used effectively.
- (vi) Where municipal bye-laws and zoning regulations are not compatible, the municipal bye-laws should be revised suitably.
- (vii) A good comprehensive municipal licensing system would, through the exercise of licensing powers, help prevent blight and slums, aid the enforcement of land use plans and give greater regulatory powers, particularly over industrial units not covered either by the Industries Development and Regulation Act or the Factories Act. Implementation of this suggestion may need amendment of the municipal acts.
- (viii) The municipal and/or development authorities should have a systematic policy of gradual decongestion and detailed long-term redevelopment schemes for congested areas.
- (ix) In so far as the "non-conforming uses" are concerned, obnoxious or hazardous uses should be immediately removed. For others, there should be a phased programme of

removal, depending upon the period of grace granted to them.

- (x) Vacant sites amounting to wasteful non-utilisation of land and services should be subjected to normal municipal property taxes. Vacant sites should be required where these are absolutely necessary, for making good the deficiencies in regard to community facilities.
- (xi) Premature spotty development should be discouraged and compact development promoted.
- (xii) A levy in the form of conversion tax should be imposed on speculative land transfers which take place on large scale in undeveloped land lying within the municipal limits.
- (xiii) To control haphazard growth in urbanisable land beyond the city limits, particularly along highways, the municipal limits should be extended to cover the urbanisable area declaring it as 'controlled' area.
- (xiv) The use of land beyond the urbanisable limits should be governed by a regional land use plan. Even where a regional plan does not exist some simple special interim measures should be used to exercise control over developments.
- (xv) Necessary legislation for controlling ribbon development along highways should be passed by all State Governments as soon as possible and, more importantly, enforced efficiently. The Executive Engineer of the appropriate authority should be made responsible for watching developments along the highways and given summary powers of demolition.
- (xvi) Unearned increments in urban land and property values, being in the nature of social surpluses, must be mopped up for the benefit of the society as a whole. Theoretically, enhancement of stamp duty or the levy of an additional surcharge on it should be helpful in mopping up unearned increments.
- (xvii) Development charge should be realised when a land use is instituted or changed or when any 'development' is carried out.
- (xviii) A tax on conversion of land from agricultural to non-agricultural uses should be imposed so far as the land around urban areas are concerned, where the extent of speculation is more than anywhere else.

- (xix) As an anti-speculation measure, the public authorities must make it a policy not to allot a plot of residential land to one who already owns a residential plot in the urban area and not to allot any one individual land beyond a reasonable limit. However, exceptions could be made in case registered organisations and developers, building houses for rental purposes, and hardship cases such as individuals living in congested locality or on very small plots.

- (xx) Construction should be completed within five years after services have been provided. Thereafter, a heavy, tax increasing with the passage of time, be made applicable.

The success of urban land policy is related to proper land development and disposal methods. As the public authorities will never be in position to muster sufficient resources to acquire all needed land to develop and dispose of within a given time frame, it is necessary that the private colonisers, co-operative societies or other persons holding sizeable area of land are involved in urban land operations with positive guidelines. Resources of local bodies may be enhanced through lease, tax, development levy etc. with the view to getting the desired development works implemented.

6.5 *The Committee Appointed for Regional Plans for Bombay—Panvel and Poona Regions*

This Committee was appointed by the Government of Maharashtra, by its resolution in the Urban Development and Public Health Department in March, 1965 under the chairmanship of Dr. D. R. Gadgil with the following terms of reference :

- (a) To formulate broad principles of regional planning for the metropolitan regions of Bombay—Panvel and Poona; and
- (b) To make recommendations for the establishment of metropolitan authorities for preparation and execution of such plans.

This report has made specific recommendations regarding (a) Bombay Region; and (2) Poona Region.

According to this study the Regional Plan of Bombay should have the following objectives :

- (i) Lessen the concentrations of economic activity in the Bombay Island;
- (ii) See that the area vacated by factories or offices is not occupied by other such activities;
- (iii) Reduce the mixed landuse of industry, cattle stables, etc. with housing;

- (iv) Take measures for reducing road congestion and improving traffic pattern;
- (v) Plan for large scale slum removal;
- (vi) In relation to sub-urban areas, reduce commuting and establish relationship between residence and work place, schools, shops, and other amenities;
- (vii) Develop the mainland by creating a multi-nucleated metropolitan region, having proper relationship between working and living areas and conducive to responsible social and political participation;
- (viii) Maintain the character of the area in between as strictly agricultural or recreational.

The Regional Plan of Bombay should also attempt:

- (a) To shift heavy industries outside the main island;
- (b) To ban new industries in greater Bombay;
- (c) To develop a number of satellite towns in the area to implement the above-mentioned strategies;
- (d) To study the possible measures to be taken for rural renewal in the region;
- (e) To shift, as far as possible, the legislative and administrative business out of the Bombay Metropolitan Region;
- (f) To develop irrigation and fishing facilities in the region;
- (g) To consider the following as a part of housing policy :
 - (i) It will not suffice that sufficient area for residential use is designated.
 - (ii) The public authorities must actively move in the matter of providing residential accommodation.
 - (iii) To enable the public bodies as well as private parties to undertake housing, adequate land with basic services would be necessary.
 - (iv) Subsidy should be as low as possible in order to cover greater number of beneficiaries.
 - (v) To ensure that land prices do not skyrocket to foul up all housing schemes.
- (h) Government should consider setting up Land Commission (on the line suggested in UK) and vest it with requisite legal power to control the skyrocketing of land prices.

According to this study, the Regional Plan for Poona should consider the following :

- (1) Main problems related to development of older city :
 - (a) Lack of open spaces and high congestion of population in the central wards of the city;
 - (b) Movement of traffic in the shopping centres;
 - (c) Location of ware-housing and godowns in relation to inward and outward movements of goods and prevention of movements of trucks within the city;
 - (d) Clearance of slums and movement of population from congested areas;
 - (e) The lack of a logical order in the location of industrial areas and housing areas and increase in the number of commuters thereof; and
 - (f) Partly related to most of these and partly a complex problem in itself is the planning of the Centre of the city on the two banks of Mutha.
- (2) The original character of Poona city i.e. educational, administrative etc. should be continued as the city is well suited and equipped for these functions.
- (3) New industrial development should be allowed outside the main Poona city.
- (4) Establishment of well-developed satellite towns in the region is deemed necessary to take care of future urban growth;
- (5) A regional plan must have statutory backing to be capable of being enforced and implemented. A Regional Planning Act, should, therefore, be passed at an early date.
- (6) A Regional Planning Authority must be sufficiently high-powered and representative. It must be independent of the several local public and other semi-public authorities operating in the region at various levels, in order to be able to influence their decisions and to be capable of taking a comprehensive view of total regional conditions and interests; and at the same time it must not be so far removed from these authorities as not to be able to understand their points of view and appreciate their operations.
- (7) Enforcement of the plan should be left to the various local and revenue authorities in the region. Appellate powers to this respect should remain vested in Government.

Though the Report was prepared in 1965, many of its suggestions are valid even today. It is an excellent model for initiating regional planning and development in other regions of the country.

6.6 Committee of Ministers on Shortage of Town Planning Personnel, 1966

The Committee was appointed by the fifth Conference of State Ministers for Town and Country Planning in February 1965 under the chairmanship of Dr. Rafiq Zakaria, Minister for Urban Development and Works, Maharashtra Government. The report was submitted to the Union Minister for Works, Housing and Urban Development for action in 1966. The terms of reference of the Committee were to analyse the shortage of town planning personnel in the country, suggest the steps to be taken to augment their supply to meet the plan requirements as well as the normal built-up of town planning organisations at the central, regional, state, district and local levels.

Observations

A detailed analysis is done and observations on the future trend are made on the following aspects :

- (i) Scope and objectives of town planning;
- (ii) Present (in 60's) set-up of town planning departments with their problems and difficulties;
- (iii) General shortage of town planning personnel and measures to overcome the shortage;
- (iv) Shifting of planning personnel from organisation to organisation;
- (v) Conditions of Services of town planning personnel.

Recommendations

- (i) Measure for meeting shortage of town planners—should be :
 - (a) Expansion of training facilities in the existing schools including the introduction of three-year part-time courses in established institutes;
 - (b) Opening of new schools of planning at suitable centres;
 - (c) Encouragement and provision of help to the professional institutes to train more people rapidly to qualify for their professional examinations.
- (ii) In order to encourage more people to take to the study of town planning the Committee recommended the following incentives :
 - (a) The State Governments should create posts of town planning probationers at

the level of assistant engineers and depute them for training in the Planning schools. Central Governments should bear 50 per cent of expenditure incurred by the State Governments over salaries and allowances of such probationers;

- (b) Alternatively, the State Government should supplement the scholarship of Rs. 250 per month being offered by the Ministry of Education to private students prepared to undergo the post-graduate course in planning to the extent of Rs. 150 per month. Students who avail of this additional assistance from the State Governments should undertake to serve the State concerned for a minimum period of two years.
- (iii) For meeting immediate needs of local bodies, the institution of one-year special training programme for Civil Engineering diplomas holders, architectural assistantship diploma holders and graduates in social sciences should be considered to enable them to function as town planning officers in small towns under the guidance of qualified town planners.
- (iv) The Town and Country Planning Organisation should arrange systematic in-service training to unqualified personnel working in the various central and state town planning departments to enable them to become better fitted to carry out their tasks and at the same time gradually prepare themselves to become qualified town planner by appearing at the Associateship Examination.
- (v) All the fellowships available for foreign training in town and country planning should be fully utilised and preference should be given to the qualified town planners who are already working either at the Centre or in one of the State Town Planning Departments to specialise in particular aspects of town and country planning.
- (vi) To help staff town planning departments in the Union Territories, a deputation reserve should be created at the Centre for deputing town planners to work in the Union Territories.
- (vii) Qualified town planners should be started on a scale one step higher than that of Engineers or Architects. There should be no difference in scales of salary between the

town planners with a background of Engineering or Architecture and the town planners with a Master's Degree in one of the Social Sciences. In admissions to Planning Schools, however, a quota of 75 per cent should be reserved for graduates in engineering and architecture.

- (viii) To remove the sense of insecurity among planning personnel, the States Town Planning Departments should be made permanent and as many posts as possible converted from temporary into permanent ones.
- (ix) The Central Government should introduce uniform scales for town planners in various departments and autonomous organisations financed by it. The State Governments should similarly ensure uniformity in the salary scales in the departments and organisations under them.
- (x) Posts in the Town Planning Departments should be created under a hierarchical pattern so that there should be reasonable prospects of promotion as one gains more and more experience.
- (xi) A permanent cadre of town planners should be established at the State level so that the local bodies may be able to get well qualified and experienced town planners to serve with them on deputation.
- (xii) Town planners should be given adequate powers, through appropriate status, to enable them to function effectively in regard to plan preparation, plan enforcement and plan execution.
- (xiii) Close co-ordination between and State Town Planning Departments and other State Departments should be established so as to enable proper correlation and co-ordination of the various physical development contemplated by agencies. Similarly, wherever a development programme, involving substantial physical changes or improvements, are involved, the Central T.C.P.O. should be consulted before it is approved.

6.7 The Task Force on Planning and Development of Small and Medium Towns and Cities

The Ministry of Works and Housing, Government of India, at the instance of the Prime Minister, constituted this Task Force in 1975 having Professor

Bijit Ghosh as Convenor. The terms of reference were given as :

- (a) To generally assess the pattern of evolution of towns and cities since Independence;
- (b) To examine laws relating to local administration and urban development and to suggest suitable modifications to these laws, keeping in view the need to assist in the planned growth of small and medium towns.
- (c) To formulate guidelines and regulations relating to matters such as zoning, set-backs, building control and such other relevant matters.

Observations

Based on the primary and secondary data collected by it, the Task Force made very systematic observation on the following items :

- (1) System of human settlements in India;
- (2) Contemporary scene of national issues and themes on urbanisation;
- (3) National Plan, Policies and Programmes;
- (4) State Policies and Programmes;
- (5) Analysis of selected small and medium towns and cities in terms of their economic structure, administrative status, evolution and growth of urban settlements, hinterland and fringe population, peripheral barriers and constraints, proneness to natural calamities; incidence of crime, pattern, intensity; ownership, price and use of land; utilities, facilities and services; community facilities; leisure and recreation; intracity development; unauthorised construction.
- (6) Urban Management—organisational system and financial aspects.

Recommendations

(1) National and State Level

In order to allow the political process to initiate and accelerate development which would benefit and enrich the small and medium towns and cities, it is necessary to activate among the existing elite their role perception. This exercise is all the more necessary at the district level and below so as to cover a larger segment of potential beneficiaries. Similarly, the process can be suitably aided by a dedicated administration, committed to the social and economic goals set before the country. Ultimately, this may help initiate and accelerate urbanisation to the benefit of small and medium towns and cities in a system of human settlements. For this process, it will be necessary to remove adverse legacies.

The man-made systems should be complementary to the organic system and, in this context, it is necessary to identify the habitable regions. In establishing the habitable regions, it would be necessary to remove the constraints that stand in the way of intensive utilisation of existing areas and extension of the territory of habitable regions. This can be done by determining the land use on a national scale for the present and future. Such land use should take into account the location and function of small and medium towns and cities and their linkages.

The national land use policy should be further spelt out at the state level and be supplemented in a manner so as to effectuate integrated area development. In doing so, it is important to select those small and medium towns and cities which by their potentialities and propensities, can initiate and accelerate the process of urbanisation. Such a selective approach is particularly necessary in view of the limited resources and capacity to deal with all small and medium towns and cities at the same time. In this context, the evolution of small and medium towns and cities for cultural assimilation and synthesis should receive important consideration. Furthermore, the need for establishing new human settlements in habitable regions would necessarily arise.

The national population policy should be supplemented by national population distribution policy linked to a system of human settlements. The present imbalance in population distribution has resulted in exploding metropolises; this should be corrected by a proper redistribution of population among the small and medium towns and cities by making them attractive human settlements. This would help change the present trend in migration also. The study reveals that most of the 219 large towns possess the potentiality and propensity to deplouraise large cities and metropolises and simultaneously activate small and medium towns and the rural hinterland by properly harnessing their growth impulses.

The development of small and medium towns can be brought about by developing human resources through social services, thereby helping to bring about effective socio-economic transformation.

The development of man has to be achieved through mobilisation of human and natural resources, for which purpose a resource inventory of both the habitable and non-habitable regions should be prepared. If the resource mobilization is linked to spatial planning, it would contribute to the development of small and medium towns and cities.

The type and level of economic development should relate to the growth potential of small and medium towns and cities. Accordingly, the industrial location and licensing policy needs to be oriented not only to areas but also to the requirements of a system of human settlements, keeping in view the development of those industries which have the capacity for significant labour absorption.

Industrialisation is not necessarily urbanisation. Integrated sectoral development with a system of human settlements should be the base for urbanisation. The diversification of the industrial base is necessary so as to make it cater for agricultural development which would strengthen the whole system of markets in its wake.

There is the need for recognition of the informal growth of the economy which absorbs the majority of labour, having neither skills nor capital. This growth is at present unmanageable but to match it with formal growth of the economy, it would be necessary to take immediate steps to facilitate its progressive transition to the organised sector. In addition to the location of labour intensive and small industries in small and medium towns and cities there is also need to encourage, revive and strengthen cottage industries in these human settlements. Adequate vocation training facilities should also be provided to improve skills.

There is need for a land policy, covering acquisition, development and disposal for all settlements. There should be a national guidelines for the formulation of land policies for adaptation by State governments and Union Territories. The provision of inadequate outlays for urban development (e.g. 5.19 per cent of total public sector outlay of Fifth Five Year Plan) and concentration of these outlays in the metropolises has affected the development of small and medium towns and cities which deserve adequate outlay for their growth.

Institution and infrastructure, appropriate technology, diffusion of innovation and energy are the main instruments for socio-economic change in human settlements. The small and medium towns and cities can be made attractive and functional with the building up of institutions and development of infrastructure. Such institutions and infrastructure should be provided through district level planning.

The type of level of development and services to be provided in small and medium towns and cities may be determined by the choice of appropriate technology. In this context, decentralisation of economic and other activities may be instrumental in

making effective and efficient use of the appropriate technology. To do so, the political process at district level and below should endeavour to avail local resources, skills, entrepreneurship and investment by diffusion of innovation. The development of small and medium towns and cities should take into account the need for a change from non-commercial to commercial energy.

For the redistribution of population together with decentralisation of economic and other activities from large cities and metropolises to small and medium towns and cities, transportation and communication will play an important role. A clear policy is required to provide physical linkages to small and medium towns and cities which, in turn, will develop and strengthen the omni-directional functional linkages of these human settlements.

Housing the poor in small and medium towns and cities is a basic necessity and should be attended to by appropriate authority in consonance with suitable land policy. Attention should be paid to the development of appropriate building material industry and techniques.

Tourism can play an important part in the development of small and medium towns and cities. A survey should be made to determine the economic benefits that may accrue to existing small and medium towns and cities (which have the necessary potential) and also for identifying new tourist destination areas. Development of tourist facilities should be integrated with that of urban settlements.

The building of new towns provided scope to initiate and accelerate urbanisation. The planning of industrial township should take into consideration not only the requirements of public undertakings but also the totality of factors concerning urban development. Similar integrated approach is needed for other new towns also.

In cantonments, planning and development of the civil areas, including Sadar Bazar, should receive immediate attention. Coordination between the civil and defence departments at the level of state or Union Territories is necessary for military stations.

There should be a policy for disaster-prone towns and cities. Location of industry should be discouraged in towns-prone to natural disasters. Special efforts are called for in regard to settlements which have a large refugee population. The development of hilly and tribal areas is possible by developing small and medium towns in those areas possible by developing small and medium towns in those areas and this deserves special attention.

The need for the conservation of historical monuments, areas and buildings of archeological and architectural interest as well as, the development of areas of scenic interest all over the country; particularly in and around small and medium towns and cities is of considerable importance. For this purpose the setting up of an agency at the national level would help promote these objectives.

For the building up of an information system, mapping and documentation and preparation of resource inventories at national and state levels, assistance of the concerned agencies (such as National Remote Sensing Agency, the Census Commissioner's office, Survey of India, National Atlas Organisation and N.S.S., State Bureau of Economic and Statistics and Central Town and Country Planning Organisation) should be utilised.

(2) District, Taluka, Tehsil level and Urban Hinterland

While policies should be framed at national or state levels, the integration of socio-economic planning with physical planning for integrated area development should take place at the district level and below. In the case of command/catchment areas, the planning would necessarily extend beyond the district boundary. The development of small and medium towns and cities can be achieved by the planning of these human settlements in relation to the hinterland which may, in spatial sequence, cover taluka/tehsil, district or extend beyond the district. Such plans should be preceded by comprehensive surveys and studies. Thereafter, district plans should be prepared by the Town and Country Planning Department in the State. Such plans would promote the orderly development of small and medium towns and cities and remove problems pertaining to the urban fringe and fragmented development.

(3) Small and Medium Town and City Level

The Town and Country Planning Department in each state or Union Territory, should be responsible for the planning and control of development of small and medium towns and cities. It should first select those small and medium towns and cities which need to be developed on a priority basis. For each of these, a master plan supported by zonal plans as indicated in the guidelines in the following paragraphs, should be prepared by the department. The master plan should also follow the imperatives given in the district and area plans at lower levels. For other small and medium towns and cities, the department will prepare an interim master plan after undertaking preliminary surveys and analysis; the master plan,

zonal plans and zonal regulations for each of these human settlement may be prepared at a later date.

The following guidelines are recommended for the preparation of master plans and zonal plans :

- (a) Based on population forecasts and activity growth, a planning area, which may extend beyond the municipal area needs to be defined. While it is important to develop existing undeveloped areas within the municipal limits, the proposals in the master plan are to be so made as to ensure the feasibility of so phasing the development that there is a contiguity of development covering ultimately the entire planning area. A land policy should enable quick acquisition of land for development and prevent land speculation. It may be desirable to purchase outright the unbuilt sites proposed for new commercial areas or public or semi-public use.
- (b) While the master plan should be prepared after determining comprehensively the problems and the prospects of development, it will be necessary to consider the realities of control and implementation. While the planning area should be controlled by the zoning regulations, environmental standards, sub-division regulations and building bye-laws, which need to be strictly enforced, the proposals in the master plan for immediate development should be action-oriented and time-bound.
- (c) While the proposals of the master plan should be made in order to meet the existing gaps and harness the potentialities for development, these should also recognise the personality of a human settlement, which needs to be conserved and enriched by environmental and cultural setting and ecological balance.
- (d) For the control and implementation of the development proposals, made in the master plan and zonal plans, it is necessary that the Town and Country Planning Organisation, Government of India, should prepare a set of zoning regulations which will be adapted by each state or Union Territory after modifications to suit local conditions. These zoning regulations should detail land-uses and building constructions permissible within the broad category of each land-use. The regulations should be flexible enough, keeping the need of compatibility of land-use instead of conformity of land-use, wiping out the friction of land-use and eliminating adverse environmental impact leading to hazards and pollution. These zoning regulations should ensure conservation of areas and buildings of historic and architectural importance and scenic interest. The sub-division regulations which form a part of zoning regulations would detail population density, floor space index, plot size, road geometrics, control of urban adjuncts like roadside furniture, hoardings, etc.
- (e) The environmental standards for each of the small and medium towns and cities are necessary to protect them from deterioration. The guidelines for the environmental standards are given in volume II of the Report.
- (f) In framing the guidelines for building bye-laws, it is realised that there cannot be a set of model building bye-laws to cover all conditions and situations in the country; the building bye-laws should essentially be different for small and medium towns and cities. It is also realised that the bye-laws applicable within each human settlement cannot be operative for both formal and informal growth of community. To meet the requirements of the formal and informal sectors, it would be necessary to frame bye-laws separately for transitional and marginal communities, including slum dwellers and squatters. The guideline has been given in other part of this Report. These bye-laws should be followed by the local bodies and enforced strictly.
- (g) All encroachments and unauthorized constructions in the small and medium towns and cities should be removed and where necessary specific legal provision made to prevent future encroachments. To the extent that encroachments and authorised occupation of public land are result of gross inadequacy of basic services particularly for economically weaker sections, positive measures such as site and service programme should be undertaken as an integral part of development proposals for the urban settlement,

(h) The proposals in the master plan should identify the basic urban structure and an attempt should be made to solidify it by a concept. In addition, the urban structure should be such that the systems are functional and economically operative.

(i) Besides supplementing this urban structure and urban systems, the proposed land-use should have a socio-cultural, economic and environmental relevance. The percentage of land-use distribution for each category should vary accordingly. The proposed land-use should not be ad-hoc and unrelated but it should follow a land-use system on the basis of the hierarchy and inter-relation of the activity systems. For optimising functional efficiency, economy of land, urban investment and its pay-off, the land-use intensity should be an important consideration for the land-use system which in turn, should determine the relations between land and bulk of building under each category of land-use as well as overall gross and net densities of population. The environmental protection of land, air and water should be ensured by the proposed land-use by avoiding non-compatibility and friction. It should also aim at an orderly development of the urban form and pattern in order to translate the concept into reality.

(j) The proposals of the master plan and zonal plan for each human settlement should ensure not only the availability but also fulfilment of environmental standards, zoning regulations, sub-division regulations and building bye-laws for the provision of institutions and infrastructure which are essential social indicators for the quality of life.

(k) In the master plan, the site should be specifically earmarked and all building construction should be frozen by the exercise of zoning regulations except those which are pertinent to the land-use for parks, playground and gardens.

(l) The study of selected small and medium towns and cities reveals that the percentage of area developed with or without approach, road, water supply, electricity, sewerage and conservancy including drainage varies considerably, within each of these settlements. The proposal in the

master plan should aim at an integrated urban development in order to ensure a satisfying living environment.

In order to integrate economic development with settlement planning the following steps are necessary :

(i) In each state there should be town and country planning board which would function as the physical planning wing of the State Planning Commission; it will also be the principal authority in the land-use planning and development.

(ii) Each state should demarcate the various regions as a joint exercise between the Board and State Planning Commission and prepare outline regional plans for human settlements including the location of new towns and growth centres where deemed necessary.

(iii) District and local physical plans should be prepared within the framework of the regional plans and a suitable statutory authority should be entrusted at the district or area level to draw up detailed plans and programmes on the basis of the settlement plan, integrating rural and urban area.

(It may be mentioned that the Town and Country Planning Organisation of the Government of India has drawn up a model of a Town and Country Planning Legislation for adoption by the State Government).

Among the serious bottlenecks in implementation of the master plans have been procedural delays and rising costs of acquisition of land. The benefit of constitutional amendments in respect of quantum of compensation have yet to be pressed into service for ensuring that the values generated by economic development are made available to the society as a whole and do not go to individuals. This calls for pegging the level of compensation for all land acquired. There is need for a total departure from existing norms and values and private interest should be subordinated to the interests of society; even official pricing of land in area, zones and streets could be regulated.

(4) *Management of Local Government*

Strong and well-organised local governments are assets to the national government as it enables it to concentrate on broader matters of social people in deciding on matters pertaining to daily life and sharing in the process of development.

It would be desirable to sum up the broad parameters of the task system of urban authorities as follows :

- (1) Enforcement and regulatory functions in the light of powers vested by respective laws and rules as well as bye-laws, formulated by the local authorities themselves in accordance with processes prescribed.
- (2) Levy and assessment of taxes, collection of taxes and other revenues, management and maintenance of public properties and raising of resources;
- (3) the day-to-day provision, maintenance and delivery of services practically at the citizen's door—sometimes described as personal services requiring conscious participation—out of its revenues mostly raised from taxes and rates; and
- (4) the planning of growth and expansion and the development of urban infrastructure with long-term capital budgeting and investment to be liquidated through a judicious mix of revenue savings and source generation.

The processes of urbanisation and economic development do not respect notified municipal boundaries. While municipalities could handle local problems of micro planning and development, spatial planning and town expansion must of necessity transcend municipal boundaries and embrace the areas of other local authorities, urban or rural.

The council and its members generally adopt a case to case approach on each individual proposal meeting frequently increasing manifold the number of agenda items. The essence of democracy lies in the power of elected council to enunciate policies and write them into rules and bye-laws, approve programmes and their priorities and incorporate them into its budgetary and fiscal measures, after due consideration of the expert advice and information given by its technical, financial and administrative officers. Beyond this its role should be to control but not to execute and to hold the executive answerable for enforcement of its rules and bye-laws and speedy execution of its programmes.

All the measures to strengthen the president and executive officer have failed to strike at the basic malady of municipal decision making processes inasmuch as neither the president nor the executive officer has been vested with the basic powers of sanction of expenditure and full authority over staff, which lies at the core of the principles of management and accountability. It is essential to introduce

a strong executive system where the head of management is allowed to implement the decisions and carry out execution of programmes with speed once they have been voted upon and incorporated in the annual budget of the municipal council.

There are three possible alternatives that the Task Force considered about the executive structure of small and medium towns and cities :

- (1) the president/chairman being given all executive powers of enforcement sanction and appointments—as in the case of strong mayor system in the U.S.A.
- (2) the Executive Officer/Commissioner-Manager being vested with full executive authority, answerable to the full council, the President being the presiding officer and a possible link between the executive and deliberative wing;
- (3) The President as the Chief Executive and one or two Vice-Presidents selection by him from members functioning as a mini-cabinet jointly responsible to the council for all executive work and management of municipal services.

The Task Force is strongly of the view that unless one or the other alternative is adopted the functioning of local bodies cannot be placed on a sound footing. The state government may adopt one of these alternatives suiting the requirements and conditions of small and medium towns and cities. The adoption of any of these alternatives will help to obviate the drastic recourse to supersession of local governments.

There are two conditions, however, that are essential for the proper functioning of any of these alternatives :

- (1) the accountability of the Chief Executive to the Council; and
- (2) the development of a professionally competent cadre to build up expertise and accumulate experience specialising in urban management with all its growing complexities.

The management and organisation of state-wide cadre requires in many cases to be streamlined particularly in the matter of transfer and postings and proper accountability to municipal authorities. Local governments continue to suffer from a dearth of staff appropriate level in specialised fields.

The requirements of small and medium towns and cities, as of all authorities, have to be viewed from the angle of current needs for services and financing

of development to take care of the pressures of growth. This calls for :

- (1) a substantial improvement in the tax capabilities and revenues of local bodies; and
- (2) provision of capital finance through loans and plan allocation for implementing development plans.

In order to provide finance for remunerative projects in small and medium towns and cities the Task Force recommends setting up of urban development finance corporation at the state level on the line of Kerala Corporation.

Separate revenue and capital budgeting as recommended by the Committee on Municipal Budgetary Reforms as also a progressive integration of the two both for development and maintenance activities, needs to be introduced.

The financial weakness of municipal authorities is partly due to poor tax administration in the matter of levy, assessment and collection of taxes. The weakness can be removed by strengthening administrative structure and re-organising the organisational structure as recommended earlier.

The financial difficulties of the local bodies are also due to the unsatisfactory fiscal relations between the State Government and urban authorities. The state plans generally do not take into account the requirement of urban local bodies.

The Task Force reiterates the recommendations of the Rural-urban Relationship Committee as well as of the Committee on Municipal Budgetary Reforms for setting up periodically municipal finance commission in each state well ahead of the appointment of the National Finance Commission.

The establishment of special purpose bodies has thrown up difficult problems of inter-authority relationship. Planning for urbanisation and regulating land-use must cut across municipal boundaries and embrace a system of human settlements—from the village to the city and in some cases even the metropolis. This calls for designing of an area-wide local government system. The size of the settlement and local field units have to be related to human scale and criteria. This called for restructuring of local governments so as to combine both large and small units within one framework.

Even the smaller units have to be large enough to be viable and will require some reorganisation and grouping of human settlements at the village and small town, levels. The village panchayats, it has now been widely conceded, are incapable of functioning as local government units.

Decentralisation of power and decision making which will contribute to effective public participation is dependent on the existence of strong well-equipped viable units of local government.

Local and district planning and executing agencies and levels of government duly equipped with appropriate expertise for preparation of plans and project formulation have to be set up.

The Task Force is of the view that only a strong well-equipped district level local government can effectively perform these tasks of planning and implementation duly supported by the state government and this can be secured by a refashioning and reorganisation of the local government system both rural and urban.

The following steps may be considered for the reorganisation of local government for an inter-related system of human settlements :

- (1) the basic unit would comprise a central village and the surrounding villages forming a panchayat. These should function under the supervision and guidance of the next higher level, which should approve their budget and programme;
- (2) the next tier of local government should be the block council having about 8 to 10 of the above small and medium towns and cities falling within the area. The above local governments units should be equipped with necessary technical and administrative staff for performance of routine functions relating to delivery of personnel services and their maintenance. It is evident that they will not be able to offer higher level technical and management staff for larger planning and development which will be located at the district level;
- (3) the district level local government will be the next higher level of government. This will ensure a large enough area to provide the necessary resources enabling planning and development function to be performed on an area-wide basis;
- (4) in certain cases, it may be necessary to demarcate units which may include more than one district for purpose of co-ordination. The main responsibility of the co-ordination machinery will be to work out a human settlement plan and its interlinkages.

Local bodies have not been able to exercise enforcement powers effectively due to :

- (1) the defect in laws and limitation of powers;
- (2) failure to frame bye-laws or to revise them to meet current needs;
- (3) limitations of jurisdiction;
- (4) inappropriate procedures and enforcement machinery; and
- (5) the problems of personnel and technical competence and awareness.

The existing bye-laws are often sketchy and omit some vital matters; in certain towns they do not exist at all. The Task Force felt that the practice of formulating a building code for all the municipalities should be adopted in each state under the rule making power of the state government. The local bodies should also be encouraged to come up with the proposal for local variations and the rules may provide that the state government may allow changes to suit local conditions; it is also possible to provide for some relaxation in respect of small towns.

An important omission in building control in practically every municipality has been the absence of steps to regulate building lines, so that in growing towns of all sizes constructions are seen to come up with a haphazard irregular frontage, guide-lines in regard to building bye-laws have already been incorporated in other part of the Report.

The executive tasks of sanctioning of building and sub-division plans should vest in a full-time official, preferably a town planner at the block or district level local government.

Apart from the rule and bye-laws on the above mentioned matters there are a number of matters affecting environment, for which municipal acts empower the local bodies to make bye-laws. In many cases bye-laws have not been formulated and in others bye-laws framed long back have fallen into disuse. The State Government should set up a special working group to review the existing bye-laws and draw up fresh bye-laws where necessary, which could be adapted by local bodies.

The Task Force is of the view that there should be a separate department at the state level for local government responsible for the management, administration, planning and development of a system of human settlements. The department should look after local administration, regional and local plan-

ning and urban development. The town and country planning department in the state should be placed in a position to advise all departments of government concerned with planning and development.

6.8 Task Force on Professional Matters of the Institute of Town Planners India, 1986

The Task Force was established by the Institute of Town Planners India as follow-up the recommendations of its General Body in 1986 to study and recommend the role of town planners in the emerging needs of urban development. The report was submitted to the Prime Minister and the Planning Commission for their consideration.

Observations

The Task Force studied and made observations on the following aspects :

- (i) Achievements in town and country planning;
- (ii) Town Planning profession;
- (iii) Urban growth and regional development;
- (iv) Planning as a specialised discipline; and
- (v) Role of planner in planning and management at urban and regional level.

Recommendations

The Task Force recommended the following actions for the Central and State Governments :

- (a) Appointment of a Town Planner as a member of the Planning Commission with adequate organisational support within the Commission so that at that level, the integration of physical development with economic and social development objectives is clearly seen and projected at the national and sub-national levels.
- (b) Appointment of a town planner as a member of the State Planning Board/Commission so that at the State level, the physical dimensions of social and economic development proposals are clearly foreseen, and built into the state sectoral plans in an integrated manner.
- (c) Upgrading the post of Chief Planner in the Ministry of Urban Development at the Centre and at the States to the level of Secretary to the Government heading urban and regional development departments.
- (d) The creating of a town planning cell headed by town planners of the rank of joint secretary in economic ministries dealing with

industries, agriculture, forestry, environment, mining, power generation and transport, both in the Central and State governments. This cell will continually study the physical implications of sectoral development programmes and devise locational policies in a time-space frame for their respective programmes. They will interact with Central and State level town and country planning departments and provide the requisite inputs for its work.

- (e) The Chief Executive Officers of the urban town planners with an adequate number of town planners within the authority to undertake planning, execute development and monitor development continually.
- (f) At district and block level, a qualified town planner must head the team as the chief coordinator with appropriate status and authority.

6.9 Delhi Improvement Trust Enquiry Committee

The Government of India appointed this Committee in 1950 to examine the shortcomings and achievement of Delhi Improvement Trust which was started in 1937 to plan and execute some important urban development schemes to ameliorate the living conditions in the development area of Delhi and to shift the excess population.

The Committee identified the shortcoming of Delhi Improvement Trust as :

"The Trust frozen considerable areas of land under Town Expansion Schemes, but it has not developed them. It disposed of plots of developed lands to the highest bidder or tenderer which was against the objective with which the Improvement Trust had been set up. It lacked the necessary financial resources for discharging its obligations of development, which led in turn to its pursuing a policy of selling lands to the highest bidder without a regard to its anti-social repercussions."

The Committee, therefore, concluded that the prerequisite for proper planning of the city would be to conduct a civic survey and prepare a master plan, which the Trust had failed to produce and the Committee suggested the setting up of a single planning and controlling authority for the development of the whole of the urban area of Delhi.

In addition to the eight committees referred to above, the Planning Commission and some Ministers at the Centre and in the States have been appointing

task force and committees for planning in general or for specific projects. For example, the Task Force of the Planning Commission working on Urban Development and Housing in the Seventh Five Year Plan, had four task forces, viz.

- (i) Planning of Urban Development;
- (ii) Financing of Urban Development;
- (iii) Management of Urban Development
- (iv) Shelter for the Urban Poor and Slum Improvement.

Their recommendations are quite revealing to handle the urbanisation problems. However, all these recommendations are not included in the Seventh Plan document due to the problem of balancing the resources and capabilities.

6.10 Major Court Decisions on Urban Planning Matters

(i) Zonal/Subsequent Plan

In the case of *M/s Goicha Theater and others Vs. Lt. Governor of Delhi and others* 1983, the honourable Delhi High Court has observed that Master Plan of Delhi is a basic pattern of framework. No doubt, zonal plans are subordinate to the Master Plan but in reality the real execution is done through these plans and therefore the zonal plan is the local plan, which administers the land and its development in a zone, under the general aegis of the Master plan.

From the above observations it would be seen that though the Master Plan is a legal plan it is not by itself implementable and, therefore, subsequent plans are also essential.

(ii) Land Acquisition

- (a) Acquisition means, taking private property for public use. Public purpose is an essential condition. The citizen must know as to why he is being deprived of. The public purpose must be clearly stated where a land is required for development and development has to be in accordance with the plan. Therefore, the validity of acquisition has to be tested on the touchstone of the plan.
- (b) The question whether the purpose specified in the notification under section 4 is sufficient to make objections on section 5A of the Land Acquisition Act 1894 would depend on the facts and circumstances of each case. Therefore, if the area notified for acquisition is small or in bits and pieces it is not difficult to specify the "public purpose" for which such plots of land are needed, but if the area needed

consists of large tracts of land, the particular purpose is not easy to state in respect of each plot, and therefore in such a case the acquisition for "planned development of Delhi"

- (c) Land for planned development is a public purpose. In the case of *Allatoun Vs. Lt. Governor*, AIR 1974 Supreme Court 2077, the court observed that metropolitan cities all over the world had grown so rapidly and enormously beyond their original boundaries as to call for large scale planning of not only the city proper but contiguous areas as well for their development. The Delhi Development Act of 1957 is the instrument by means of which the ideal of a more beautiful and well planned greater Delhi is to be translated into reality. It contemplates wholesale acquisition and distribution of land with or without development, in such a manner as to ensure desired objectives. The purpose of acquisition would be a public purpose, even if the plans did not actually cover an area but left it for the plans to be drawn in future. The crucial point for determination is the meaning that would be assigned to planned development of Delhi, used in notification for acquisition of land. This expression ordinarily connotes the development of Delhi according to plan, and the concept of public purpose does not require that there should be a complete comprehensive or detailed schemes or plan as to the manner in which the land is to be developed and the actual use to which these are proposed to be put to. Existence of a scheme or plan at the stage of proposed acquisition is not necessary. However there should be an indication of broad lines of development for which it will be required. In other words, if there is a decision that a particular area is required for the purpose of development, utilisation and disposal that would be sufficient for acquiring the land for planning development of Delhi.

(iii) *Use of Land and Building in Contravention of Plans*

The act provides that after coming into operation of any of the plans in a zone, no person shall be permitted to use land and building in that zone not in conformity with such plan. Further under section 29 (2) such persons who contravene the use of the plan could be prosecuted by the authority.

The Supreme Court in civil appeals no. 81-85 of 1974 *Delhi Development Authority Vs. Shrimati Leela D. Bhagwat and others* and criminal appeals number 329 and 330 of 1974 *Delhi Development Authority Vs. Sardari Lal, R. S. Bajwa and the state*, observed that "The persons prosecuted will undoubtedly have adequate opportunities of defending themselves and to show that ingredients which were necessary to be proved and established by the prosecution had not been so proved or established. Thus, for each and every prosecution it is to be established that person is misusing the land and building and only then the action could be taken against him.

(iv) *Town Planning Legislation in Welfare of People*

Town Planning is related to either land or social and economic planning. Land is state subject and the social and economic planning is a subject on the concurrent list under the Indian constitution. Almost all the states have enacted town planning legislation in one form or the other and (a) on the subject the Supreme Court in the case of *Manik Lal and Chote Lal Vs. M. G. Makwana*, AIR 1967—Supreme Court 1373 establishes the legislation competence of the state laws covering town planning which go a long way in the welfare of the people.

(v) *Urban Land (Ceiling and Regulation Act, 1976)*

Urban Land (Ceiling and Regulation) Act, 1976—AIR 1981, Supreme Court 234, *Maharao Sahen Shri Bhim Singh Jee and others Vs. Union of India and others*. It was held that the entire Urban Land (Ceiling and Regulation) Act, 1976 was valid so far as it imposed a restriction on transfer of any urban or urbanisable land with a building or of a portion of such building, which was within the ceiling area. In other words this section is invalid so far as it imposed a restriction on transfer of any urban or urbanisable land with a building or a portion only of such buildings which was within the ceiling limit. Such property would therefore, be transferable without the constraint in the section.

11 Conclusion

Several Committees appointed in the past at Central and State levels have significantly contributed to the evolution of planning practice in India by taking stock of existing situations, pointing towards distortions in the planning process analysing problems pertaining to various aspects of plan preparation and implementation and charting out guidelines for future actions. Many a time, these Committees were able to sensitively perceive, ahead of others, the emerging needs of the profession, sounded cautionary notes, and advised on the necessities of bringing in new inputs

or expanding the scope and content of planning practice enriching it in the process.

Whereas the earlier Committees concerned themselves mainly with the need for clearly defining the scope of planning and for laying down an elaborate institutional base for it, the latter committee have devoted their attention mainly to the problems of plan implementation.

The Bhore Committee in 1946 recommended for creation of ministries of housing, town and village planning at the Centre and in the States, establishment of central and provincial directorate of planning, adoption of comprehensive legislative acts all over the country, training and education of town planners and introducing procedures for planned development of towns and villages.

The Madras Provincial Town Planning Enquiry Committee (1949) was created to suggest ways and means for expeditious preparation, approval and execution of all town planning schemes. It particularly emphasised the need for preparation of town planning schemes with the stipulated period to avoid delays. It highlighted the need for expanding the scope of planning to simultaneously study regional and rural issues along with those concerning urban areas.

The Report of the Committee on Urban Land Policy (1964) was significant in many ways. It provided for the first time, detailed guidelines for an urban land policy with a view to achieving optimum utilisation of land. Problems of acquisition, development, disposal and use of land were studied within coordinated and multi-dimensional framework pertaining to legislation, planning, administration and finance. The main concern of the Committee was to see that the scarce land resources did not get concentrated in the hands of few and hence suggested various measures for curbing speculative tendencies within already developed areas, fringe areas of existing cities and within proposed urbanisable limits. The Committee emphasised the importance of capital improvement budgeting as a tool for ensuring better implementation of urban area plans. It also suggested various ways of mobilising finance for development work and improving development control regulations. The need for having a regional perspective for urban area plans was again highlighted.

The Committee appointed for the Regional Plan for Bombay-Panvel and Poona Region (1965) was the first to directly focus attention on the regional planning issues. Policies for decentralisation of economic activities from the central cities of metropolitan regions were formalised. The recommendations of earlier

Committees for considering regional dimension of cities while planning had by now been given concrete shape in the form of metropolitan region development plans. A balanced regional development was sought to be achieved through the instruments of industrial location policy and satellite towns. The Committee strongly professed for giving statutory backing to regional planning and suggested that a Regional Planning Act should be passed at an early date. The Committee also suggested that high-powered regional planning authorities be created to implement regional plans and for co-ordinating the activities of various local bodies within the region.

The Committee of Ministers on Shortage of Town Planning Personnel (1966) tackled yet another problem related to the planning profession, that is, the shortage of planning personnel. The Committee deliberated in depth on the steps to be taken to augment the supply of trained town planners. They recommended establishment of a permanent cadre of town planners at the State level and adequate powers for them to enable them to function effectively in regard to plan preparation, plan enforcement and plan execution.

Perhaps one of the most valuable documents to date concerning town planning in India, has been the report of the Task Force on Planning and Development of Small Towns (1975). The Task Force suggested that a national land use policy should be formulated which, in turn, should be spelt out at the state level. It also favoured a national population distribution policy linked to a system of human settlements. According to the Task Force Report, effective spatial planning (whereby population distribution will be linked to resource distribution) will contribute to development of small and medium towns and cities and would go a long way in mitigating the problems of metropolitan centres. The Report of the Task Force made strong recommendations for encouraging growth of small and medium towns and cities as a way of achieving a balanced system of human settlements. The Task Force supported the recommendation made by earlier committees about the need for formulation of a land policy for all settlements and further suggested that national guidelines should be framed in this regard and adopted by the State government and Union Territories. It came out strongly in favour of increasing allocation of urban development sector in the Five Year Plan outlays and fair distribution of expenditure amongst all size categories of towns and cities rather than concentrating on few metropolitan centres. It also suggested institutionalisation of integrated area development at district level and below for

a realistic appraisal of the needs at grass roots level, availing local resources, skills, entrepreneurship and in the process make planning a more down to earth process. Simultaneously, it favoured adoption of a transport policy for providing physical linkages between settlements, innovative methods for housing the poor, and development of appropriate building materials industry and techniques.

The Report highlighted the need to integrate economic development with settlement planning. In this respect, it recommended setting up Town and Country Planning Boards which would function as physical planning wing of the State Planning Commission and would be the principal authority in land use planning and development. It further suggested that regionalisation exercises should be done in all the states and regional plans prepared so that district and local physical plans can be prepared within a framework set at higher levels of planning. The Task Force strongly criticised the practice of developing industrial townships and instead recommended that integrated towns and cities should be planned taking into account not only the requirements of public undertakings but also the totality of factors concerning urban development.

The Task Force also emphasised the need for having a strong and well-organised system of local governments with a clearly specific executive structure, state-wide cadres of professionally competent urban managers, and substantially improved revenue base. It suggested creation of urban development corporations in each state to provide finance for remunerative projects of local governments.

The Task Force on professional matters of the Institute of Town Planners, India (1986) has sought appropriate status and authority for planners. It has also supported the recommendation of the earlier Task Force (1975) about the need to integrate economic development with settlement planning. It has recommended that town and country planners should not only

be associated with Planning Commission and the State Planning Boards but with the ministries also dealing with industry environment, mining, power generation, and transport, both at the Centre and in the States.

The major court decisions on urban planning have also been providing, from time to time, guidelines for tightening legislative activities related to planning and have therefore, been instrumental in increasing the implementability of plans. One of the important conclusions which can be drawn from the court decisions is that the master plans, though legal documents, do not by themselves constitute implementable plans. They need to be detailed out in the form of zonal and layout plans. However, the process of preparing the master Plan is so cumbersome and time consuming that detailed implementable plans for the total area covered by the plans are never completed in the lifetime of the master plan. Hence a more flexible approach on the line of structure plans is needed. For implementing the idea of preparing the urban area plans within the framework of a system of development plans as envisaged by the structure plan, a multi-level integrated planning effort will be needed. Policies conceived at the national level will have to be spelled out in detail at the district and lower levels and the settlement or local level plans will have to be prepared within the framework of the policies chartered at higher levels.

The imperative need of planning today is that settlement level planning should be integrated with economic development planning within the overall framework of spatial planning so that population holding capacities of areas based on resource availability can be realistically established. On the other hand, the integrated area plan will have to be detailed out in the form of capital improvement programmes so that implementing agencies can be better prepared to provide feedbacks for a realistic need-based and resource-based planning.

Recommendations

A brief analysis of urbanisation trends in India, the relationship of urbanisation with economic development, and the comparison of Indian urbanisation with the conditions of urbanisation in the developed countries, revealed that a higher level of urbanisation and growth of more urban places is essential for the benefit of the people in the country. A sample survey of the urban planning and development agencies as well as related agencies in the country has revealed several problems concerning urban planning and development as given in Table 7.1. The problems are observed in plan formulation, plan approval, development finance, and development management aspects. The suggestions for urban planning and development in future should be guided by such felt problems and in the light of conclusions of the analysis of the aspects covered above, such as factors affecting planning, evaluation of planning in the past, strong and weak points of legislative support, weaknesses of planning and development organisations, relevant recommendations of various committees constituted in the past and the judicial views of the Indian courts at the Centre and State levels.

Suggestions have been received from agencies, related both directly and indirectly to planning, for improvement in the existing processes of urban planning and development in India. These are listed by States in Table 7.2. The recommendations of the study, synthesising all the aspects and views, are given below :

- (i) For a better environment in future, appropriate systems need to be introduced for proper physical planning and defining the role of physical planner.
- (ii) Physical planning should change from simple and conventional techniques to new and more scientifically rationalised techniques. India being a large country and having a wide range of urban situations should not search for any single planning process and technique. Physical Planning contents & processes may be

based on level of urbanisation, size of urban settlements and their nature.

- (iii) A thorough reorganisation of agencies involved in urban development has become necessary. The role of local governments in plan preparation and plan implementation should be consciously evaluated and if they are identified as potential nodal agencies for development purposes than they should be strengthened and made more purposeful.
- (iv) The country needs to promote and direct healthy urbanisation in future for which several types of decisions and actions need to be taken. One of the foremost decisions has to be in terms of a settlement policy at the national, state/regional, district/sub-regional/metropolitan, and tehsil/block level. The settlement policy at the lower should be detailed out in the context of higher level policies.
- (v) Urbanisation pattern, to a great extent, is guided by the location of major economic activities. To make this as a basic requirement in guiding urbanisation, it is necessary to properly delineate planning regions at national level and sub-regions at state level, taking into account the accepted administrative boundaries. The integrated guidelines for location of economic activities, based on the constraints and potentials of the planning regions and sub-regions, should be available for balanced development.
- (vi) The planning and development doctrines at each level should be such as to achieve development without environmental degradation and simultaneously allow for development with growth and equity i.e. with focus on employment generation, redirecting investment to basic needs, human resource development and integrated rural development.

- (vii) Planning and development in urban areas should be guided by the cultural heritage and socio-economic status of the people. The old models available from ancient and other periods should be duly considered. While doing this, the objective should be to create human settlements with the qualities of livability, efficiency, appearance, amenity, flexibility and economic soundness.
- (viii) The overlaps and conflicts in the local provisions of various urban planning and development agencies should be eliminated through amendments in existing laws or introducing new comprehensive acts according to the conditions in each State. In this direction, the central Town and Country Planning Organisation has prepared in 1985 a Model for Regional and Town Planning and Development Act. The state governments and the administrations of the Union Territories should improve upon the existing acts using the new Model Act.
- (ix) The Central and State governments and other local bodies should prepare estimates of the number of professional planners with specific specialisations required to be recruited during the next 5-10 years so that necessary measures can be taken to improve the quality of urban planning and development.
- (x) It has been observed extensively that there is a confusion in dealing with urban planning and development jobs. Largely, the drawbacks are associated with the involvement of persons who are not trained in the field of physical planning and development. This implies that :
- (a) An urban and regional planner's act should be passed by the Parliament, like the specialised acts for some other disciplines. This will help to authorise only the qualified personnel to be responsible for urban planning and development works and secure the desired qualities of urban environment.
 - (b) Every planning and implementation body should have a planning division headed by a qualified urban planner, who should be at par with other departmental heads.
- (c) The layout plans of any area measuring more than five hectares in size should be designed and approved by a qualified urban planner.
- (d) All project towns should be planned and executed by/or under the supervision of a qualified urban planner.
- (e) The detailed development controls and building regulations should be flexible enough to adjust to the condition of a particular city, socio-economic changes and inputs of the new technology.
- (xi) The organisations dealing with urban planning should be involved in execution works also. Measures should be taken to get adequate urban planning personnel not only to deal with planning but execution of projects as well.
- (xii) An urban planner should be appointed as a member of the Planning Commission and as a member of the State Planning Boards with adequate organisational support to integrate physical development with economic and social development objectives laid down at the national and sub-national levels.
- (xiii) An urban planning cell headed by qualified urban planner of the rank of a Joint Secretary in ministries dealing with industries, agriculture, environment, mining and power generation, and transport, both in the central and state governments should be created.
- (xiv) Urban and regional planners should be appointed at district and block levels to head the teams of various development officers as Chief Co-ordinators with appropriate status and authority.
- (xv) An appropriate policy on urban land management in the light of the suggestions by the Committee appointed by the Central Govt. in 1966, should be enunciated with a view of generating adequate resources for local development and, simultaneously, serving as a positive steps to have desirable urban development.

TABLE 2-1 Trend of Urbanisation in India 1901 to 2001.

Year	Total Population	(m) Urban	Percentage	Decadal Increase (m)	Decadal Percent Increase	Cumulative Growth Since 1901
1901	233	25.85	11.00	—	—	100
1911	246	25.94	10.40	—0.2	0.14	100
1921	244	28.08	11.34	1.2	8.25	108
1931	270	33.45	12.18	5	19.08	129
1941	309	44.15	14.10	11	32.09	170
1951	350	62.44	17.62	18	41.49	241
1961	425	78.93	18.26	15	25.85	303
1971	529	109.09	20.22	20	37.91	418
1981	658	159.72	23.73	49	46.09	610
1991*	—	—	27.00	—	—	—
2001*	1000	300.00	30.00	—	—	1172

Source : Census of India

*Projected

TABLE 2-2 Nature and Spread of Urbanisation in States and Union Territories in 1971-81

India/States/Union Territories	Decennial Growth Rate (1971-81)			Urban Population as a Percentage of Total Population of State/Union Territory 1981	Percentage of Indias Urban Population 1981 (Rank)	Density of Population (sq. km.) 1981
	Rural	Urban	Total			
1	2	3	4	5	6	7
India	18.96	46.02	24.43	23.73	100.00	229
States						
1. Maharashtra	17.43	39.82	24.40	35.03	14.06(1)	204
2. Tamil Nadu	12.65	27.78	17.23	32.98	10.20(3)	372
3. Gujarat	21.89	40.82	27.21	31.08	6.76(8)	174
4. West Bengal	20.11	31.61	22.96	26.49	9.24(4)	615
5. Karnataka	18.74	50.39	26.43	28.91	6.86(7)	194
6. Punjab	16.56	43.66	23.01	27.72	2.96(13)	333
7. Andhra Pradesh	17.19	48.26	23.19	23.25	7.98(5)	195
8. Haryana	21.36	59.16	28.04	21.96	1.81(15)	292
9. Rajasthan	27.07	57.15	32.38	20.93	4.57(10)	100
10. Madhya Pradesh	19.16	56.07	25.17	20.31	6.78(7)	118
11. Kerala	15.39	37.63	19.00	18.78	3.05(12)	654
12. Meghalaya	25.95	62.74	31.30	18.03	0.21(21)	60
13. Uttar Pradesh	19.70	61.22	25.52	18.01	12.79(2)	377
14. Manipur	11.48	163.77	31.57	26.44	0.24(17)	64
15. Tripura	30.74	38.51	31.55	10.98	0.14(22)	196
16. Bihar	20.51	54.40	23.90	12.64	5.57(9)	402
17. Nagaland	40.44	133.84	49.73	15.54	0.08(23)	47
18. Sikkim	38.76	159.86	50.11	16.23	0.03(24)	45
19. Orissa	15.26	68.29	19.72	11.82	1.99(14)	169
20. Himachal Pradesh	21.50	35.25	22.46	7.72	0.21(19)	77
Union Territories						
1. Chandigarh	18.49	80.84	74.95	93.60	0.27(16)	4520
2. Delhi	6.92	27.73	52.41	42.84	3.68(11)	4178
3. Pondicherry	5.37	59.41	28.08	52.32	0.20(20)	1208
4. Goa, Daman & Diu	15.84	54.88	26.15	32.46	0.22(18)	286
5. Andaman Nicobar	55.90	89.31	63.51	26.36	0.03(24)	23
6. Mizoram	23.89	225.13	46.75	25.17	0.08(23)	23
7. Arunachal Pradesh	30.68	129.73	34.34	6.32	0.03(25)	8
8. Lakshadweep	32.08	—	26.49	46.31	0.01(25)	400
9. Dadra and Nagar Haveli	30.46	—	39.78	6.67	0.01(25)	211

Source : Census of India. Excludes information on Jammu and Kashmir, and Assam due to non-availability of details.

TABLE 2.3 Grouping of States by their Level of Urbanisation 1971-81

Percentage of Urban Population to Total Population	1971		1981	
	States	Percentage to Total Urban Population of India	States	Percentage to Total Urban Population of India
1	2	3	4	5
(1) Below 10.01	Bihar (10.00) Himachal Pradesh (6.9) Nagaland (9.95) Orissa (8.45) Sikkim (9.37) Sub Total :	5.27 0.23 0.05 1.72 0.02 7.29	Himachal Pradesh (7.2)	0.21
(2) 10.01 to 15.00	Manipur (13.19) Meghalaya (14.55) Tripura (10.43) Uttar Pradesh (14.02) Sub Total :	0.13 0.14 0.15 11.58 12.00	Bihar (12.46) Orissa (11.82) Tripura (10.98)	5.57 1.99 0.14
(3) 15.01 to 20.00	Andhra Pradesh (19.31) Haryana (17.66) Madhya Pradesh (16.29) Kerala (16.24) Rajasthan (17.63) Sub Total	7.85 1.66 6.34 3.24 4.25 23.34	Haryana (21.96) Kerala (18.78) Nagaland (15.54) Meghalaya (18.03) Sikkim (16.23) Union Territories (18.01)	1.81 3.05 0.05 0.15 0.02 12.79
(4) 20.01 to 25.00	Karnataka (24.31) Punjab (23.73) West Bengal (24.75) Sub Total	6.66 3.01 10.25 19.92	Andhra Pradesh (23.25) Madhya Pradesh (20.31) Manipur (26.44) Rajasthan (20.93)	7.98 6.78 0.24 4.57
(5) 25.01 to 35.00	Gujarat (28.08) Maharashtra (31.17) Tamil Nadu (30.26) Sub Total :	7.01 14.69 11.65 33.35	Karnataka (28.91) Punjab (27.72) West Bengal (26.49) Gujarat (31.08) Tamil Nadu (32.98)	6.86 2.96 9.24 6.76 10.20
(6) 35.01 to 40.00			Maharashtra (35.03)	14.06
(7) Above 40	Chandigarh (90.55) Delhi (89.70) Pondicherry (42.04)	0.22 3.41 0.19	Chandigarh (93.06) Delhi (92.84) Pondicherry (52.33)	0.27 3.68 0.20

Source : Census of India, 1981. Excludes Assam and Jammu & Kashmir due to non-availability of details.

TABLE 2-4 Number of Urban Areas and Urban Population Distribution by Size Class, 1901 to 2001

I Size Class	1901	1911	1921	1931	1941	1951	1961	1971	1981	Project 2001
I. No. (% Pop.)	24 (25.71)	23 (27.19)	28 (29.40)	33 (30.6)	47 (37.93)	74 (44.31)	102 (50.77)	145 (56.21)	216 (60.37)	300 (65)
II. No. (% Pop.)	42 (11.29)	39 (10.49)	45 (10.38)	54 (11.95)	77 (11.41)	95 (9.95)	129 (11.00)	178 (11.24)	270 (11.65)	350 (11)
III. No. (% Pop.)	135 (15.77)	142 (16.52)	153 (16.33)	193 (16.98)	246 (16.92)	330 (15.79)	449 (17.41)	570 (16.32)	739 (14.35)	1150 (12)
IV. No. (% Pop.)	393 (20.92)	364 (19.85)	370 (18.32)	439 (18.07)	505 (15.84)	621 (13.79)	732 (13.00)	847 (11.30)	1048 (9.52)	1200 (7.5)
V. No. (% Pop.)	750 (20.13)	713 (19.31)	741 (18.67)	806 (17.13)	931 (15.13)	1146 (13.04)	739 (7.03)	649 (4.57)	742 (3.61)	1100 (3.5)
VI. No. (% Pop.)	490 (6.18)	495 (6.64)	583 (7.10)	524 (5.27)	404 (3.17)	378 (3.12)	179 (0.79)	150 (0.46)	230 (0.50)	300 (1.5)
Total	1834 (100)	1776 (100)	1920 (100)	2049 (100)	2210 (100)	2844 (100)	2330 (100)	2531 (100)	3248 (100)	4400 —

Source : Census of India.



TABLE 2-5 Growth of Metropolitan Cities in India 1901-81

Census	No.	Population	Population as percent of Total Population	Population as percent of Urban Population	Decadal percent of Rate Population
1901	1	1,488,323	0.64	5.81	—
1911	2	2,736,814	1.11	10.70	+83.89
1921	2	3,095,584	1.27	11.18	+13.11
1931	2	3,374,014	1.25	10.23	+8.99
1941	2	5,263,916	1.70	12.08	+56.01
1951	5	11,662,860	3.33	18.92	+121.56
1961	7	17,847,564	4.20	23.01	+53.03
1971	9	27,420,820	5.18	25.63	+53.64
1981	12	42,022,854	6.39	26.91	+53.25
2001	20				

N. B. The population of Assam and Jammu & Kashmir is not included in calculation of percentages.

Source : Census of India, 1981 : "Provisional Population Tables, Series-1, Paper-2". New Delhi, P. 43.

TABLE 3-1 Evolutionary Bench Marks of Urban Planning in India

Statewise Organizations	Bench Mark Type	
	Main Highlights	Associated Reasons
1	2	3
1. Andhra Pradesh		
Town and Country Planning Department (1920)	Andhra Pradesh Town Planning Act, (1920)	To give powers to the municipal councils to undertake the preparation of town planning schemes.
	Andhra Pradesh Urban Areas (Development) Act, (1975)	To empower the Government for constitution of Development Authority
	Telangana Regions municipal councils given power to prepare master plan and enforce it (1981)	To extend planning activities to Telangana Region.
Housing Board, Hyderabad, (1960)	Erstwhile city improvement board (1956)	Organised development of municipal activities and services.
	City improvement converted into Andhra Pradesh Housing Board (1960)	To give specific attention to the problems of housing
	Post of Town Planner was created (1969)	Expansion in the neighbourhood planning activities.
Hyderabad Urban Development Authority (1975).	Notification for master plan of Hyderabad Municipal Area (1975)	Controlling land use for development.
	Development of three satellite towns (1976)	To cope with the housing demand and have effective decentralisation.
	Notification of master plan for non-municipal areas and two zonal development plans (1980)	Land use control.
	Completion of first District commercial centre (1981)	To cope with the shortage of shopping areas.
	Major multi-purpose projects (1981)	Beautification of the city.
	The Authority acquired its own building (1981).	To have the expansion of the Authority.
Visakhapatnam Urban Development Authority (1978)	Erstwhile Visakhapatnam town planning department (1962)	Need for a planned development.
	Sanction of master plan for Visakhapatnam City (1920)	Comprehensive development of the city.
	Sanction of I.U.D.P. Scheme under Central Assistance (1976)	Implementation of the master plan.
	Establishment of Visakhapatnam Urban Development Authority (1978)	Need for an area wide development authority
	Sanction of I.D.S.M.T. Scheme for three towns (1980)	Promotion of small town development.
Quli Qutab Shah Urban Development Authority, (1980)	The Authority was constituted (1981)	Plan need development of the old city.
	The Authority registered under the Societies Act, (1985)	Quick implementation of policies and programmes
	Major Projects on E.W.S. Housing construction of a School, etc. (1986)	Development of the old city.
	Road widening programmes were undertaken (1987)	To improve capacity of the road.
2. Assam		
Tinsukhia Development Authority, (1963)	Establishment of the Authority (1963)	Need for planned development
	Rental Housing Scheme, land acquisition and development scheme inaugurated (1968)	To implement the plan and cope with the housing problem.
	Opening of the Authority's own building (1981)	Expansion of the activities of the Authority.
	Inauguration of the housing scheme under HUDCO.	To cope with the housing problems.

Table 3.1—continued

1	2	3
3. Delhi		
Delhi Development Authority (1957)	Enforced the master plan for Delhi (1962)	To implement the plan proposal.
	Introduction of housing activity (1966)	To cope with the housing problem.
	Notification of the draft master plan for Delhi Prospective 2001, (1985)	The plan created in 1962 has already worked
	Approval of the draft perspective development plan 2001, (1987)	
4. Goa		
Town and Country Planning Department, (1964)	Regular planning and development control in the territory of Goa, Daman and Diu gained momentum and led to regulated development (1976)	Need for regulated urban development.
	Constitution of planning and development authorities, leading to development of major towns like Panaji, Margao and Marmugao, (1978)	Need for plan implementing agencies.
	Initiation of Draft Notification of Regional Plan for Goa 2001 A.D. (1982)	Need for regional planning begun to be felt.
5. Gujarat		
Town Planning and Evaluation Department (since the establishment of the State)	Preparation of development plans. Planning (1954) of areas outside the limits of local authorities and levy on development charge (1976)	Need for planned development in urban area. Need for planning municipal area alongwith the hinterland area mobilise finance for development.
Bhavanagar Area Development Authority (1970)	Establishment of Authority, (1978)	Need for an agency for plan implementation
	Bhavanagar area development plans prepared (1980)	One of the statutory functions.
	Preparation of three town planning schemes (1981)	Detailing of the development plan.
	Preparation of estimation of development changes (1984)	Mobilise finance for development.
	Preparation of two development plans and preparation of a town planning scheme (1985)	Consideration of planning activities in Bhavanagar area.
Jamnagar Area Development Authority (1978)	Preparation of two planning schemes. (1979)	Detailing Jamnagar Town Plan.
	Preparation of draft development plan for 28 villages and municipal areas (1981)	Consolidation of planning activities in Jamnagar area.
	Transfer of Town Planning schemes to municipal corporation and finalisation of development plan (1982)	Implementation of Town Planning schemes.
	Preparation of the development plan for Nagar area (1984).	Consolidation of planning activities.
Ahmedabad Municipal Corporation (1955)	Establishment of separate planning wing, (1955)	Expansion of planning activities
	Expansion of planning wing (1957)	Enlargement of the scope of planning work with the corporation because of the enactment of Bombay Town Planning Act, 1954.

TABLE 3-1 continued

1	2	3
6. Kerala		
Kottayam Development Authority (1981)	Proper functioning of the Development started (1983)	Consolidation of the Authority
Idduki Development Authority, (1976)	Constitution of Idduki township area development authority, (1976)	Planned development of Idduki
	Promulgation of Idduki township area development schemes (1980)	Implementation of development schemes
	Land release for the development of the township, (1982)	Implementation of the township schemes.
	Construction of various infrastructures and facilities, (1985).	Implementation of the township schemes.
Greater Cochin Development Authority, (1975)	Establishment of Cochin Town Planning Trust (1968)	Implementation of interim development plan for Cochin
	Establishment of Greater Cochin Development Authority (1975)	Implementation of area development schemes.
7. Karnataka		
Bangalore City Corporation, (1977)	Town Planning Cell was created in the organisation (1977)	Orderly development of the city
	Comprehensive development plan for Bangalore city (1984)	Comprehensive development of the city
	Plan implementation prepared by the Bangalore Development Authority.	
8. Madhya Pradesh		
Indore Development Authority, (1977)	Indore Improvement Trust converted into Indore development authority, (1977)	Improvement Trust with restructuring of powers needed to be converted into authority.
Jabalpur Development Authority, (1980)	Jabalpur Improvement Trust was created, (1963).	To initiate development of Jabalpur city
	Publication of draft Master Plan for Jabalpur (1977)	Plan development of Jabalpur
	Development Authority created (1980)	Implementation of Plan
9. Manipur		
Town Planning Department, (1965)	Preparation of Master Plan for greater Imphal, (1965)	Priority town for preparation of Master Plan
	Town and Country Planning Act, (1975)	Statutory backing for Master Plan
	Master Plan for Greater Imphal and Distt. Head-quarter Towns (1976)	Priority towns
	C.D.S.M.T. Schemes for two small towns and slum improvement schemes for Imphal (1982)	Implementation of Schemes sponsored by the Central Government
	Process started for State Capital Project (1985).	

TABLE 3-1 continued

1	2	3
10. Maharashtra		
Town and Valuation Department (1914)	Local Authorities improved to prepare town planning schemes (1915)	Need to take up small area schemes
	Local Authorities improved to prepare development plans in addition to town planning schemes (1955).	Town planning schemes found inadequate and required to be prepared in the framework of a development plan.
	Special planning authorities and New Town development authorities created statutory provisions made for preparation of regional plans in addition to development plans and town planning schemes (1966)	As the scope of planning starts enlarging of such provisions became necessary. Particularly because of problems posed by metropolitan regions.
	Financial assistance to municipal council for implementation of development plan, (1970)	Accelerate implementation plan.
	Traffic and transportation cell established (1971)	Metropolitan and major cities required special treatment.
	Urban research cell established (1978)	Growing urban problems needed to be researched.
Housing and Area Development Authority (1977)	Establishment of the Architecture and Planning cell (1977)	Civil specific attention to Architecture and Town Planning works.
	Special Planning Authority Act, (1981)	To attend to large scale projects of the Authority
Pune Municipal Corporation (1950)	First development plan of Pune, (1966), Second development plan of Pune, (1987).	Need for planned development. To take care of the extend areas.
Nigour Improvement Trust (1982)	Scheme allotment of plots to be or and homeless persons (1971)	Cope with the problem of housing for the poor
	Another scheme for the poor (1977)	Do.
	Another scheme for E.W.S. (1980)	Do.
11. Meghalaya		
Department of Town and Country Planning (1982)	Assam Town and Country Planning Act 1959 adopted in the state (1972)	Creation of the new state of Meghalaya
	Meghalaya Urban Planning and Development Authority, Bill passed by the State Legislation	To enlarge the scope of the Assam Town and Country Planning Act, 1959 to cover the entire state of Meghalaya.
12. Punjab		
Town and Country Planning Department (1962)	Regulatory Town Planning and Building schemes were taken up for planned development in urban areas in the State.	Need for planned development in urban areas.
13. Rajasthan		
Town Planning Department (1964)	Preparation of Master Plan for Town and Urban Development Schemes (1959).	Need for planned Development.
	Urban Land Disposal Rules and Urban Land Sub-division Rules prepared, Preparation of Town Planning Schemes.	Need of preparation of detailed Town Planning Schemes.
Rajasthan Housing Board (1970)	Work given out mostly to Consultants.	Selection of Architectural and Drafting staff.
	Engineer Town Planner sent on deputation	Housing Board looks up work in major towns.
	Architect Town Planner appointed on deputation in place of Engineer Town Planner.	Increase in large scale housing work all over Rajasthan.

TABLE 3.1 continued

1	2	3
14. Tamil Nadu		
Directorate of Town and Country Planning, Madras, (1922)	Town Planning Act, (1920)	Provision for preparation of planning scheme.
	Town and Country Planning Department established (1922)	To create an advisory institution for Urban planning.
	Provincial town planning enquiry committee (1946)	To identify the existing facts in the planning process & improvement.
	Govt. white paper (regional planning for Tamil Nadu) (1969)	To initiate the process of regional planning
	New Town and Country Planning Act (1971)	To provide for development authority so that development plan implementation process can be accelerated.
Housing Board, Madras (1961)	Housing Board was established	To cope with the problem of housing of Madras city.
	Housing board begun to have its own cadre of staff.	Expanding planning activities.
	The Slum Clearance Board separated from Housing Board.	Both the slum problem and housing problems needed special attention by separate agencies.
Madras Metropolitan Development Authority (1975)	Madras Master Plan enforced	The activities of the Authority increased.
	Major expansion of M.M.D.A. The project office and World Bank scheme being created.	
	Preparation of structure plan for Madras.	Rationalisation of planning process.
	Madras Urban Development Project-I	Development of Madras Metropolitan Area.
	Madras Urban Development Project-II	do.
15. Uttar Pradesh		
Town and Country	Sir Patrick Geddes invited by Lucknow Municipal Board (1915)	Need of Town Planning Schemes.
	Improvement committee set up under Mr. H.V. Lancaster (1918).	Need for civic improvement in a comprehensive manner.
	Improvement Trusts set up in Lucknow, Kanpur, and Allahabad (1919)	Need for an urgency to carry out urban development
	Kanpur Urban Area Development Board created (1945)	Need for integrated development for industrialisation and the rest of the urban areas.
	Town and Country Planning Department created (1949)	Need for planned Housing and Urban development.
	Eight survey divisions created (1962)	To collect data for preparation of Master Plans for four cities and nine regional plans.
Housing and Development Board, Lucknow (1972)	Creation of regional offices in five towns (1982)	Expansion of the Board's activities.
	Creation of a Town Planning section (1972)	Need for a self coordinated Town Planning Department within the Board.
	Creation of Architectural and Planning Units (1982)	Expansion of activities relating to house designs and neighbourhood planning.
	Increase in the status of the post of Senior Architect Planner (1987)	To cope with the increased work load.

TABLE 3.1 continued

1	2	3
Kanpur Development Authority, (1977)	Unit created for World Bank Project on low cost housing and slum improvement (1978) Appointment of a Chief Town Planner and other Planning staff (1979)	To cope with the problems of housing and slums.
Lucknow Development Authority, (1974)	Aliganj Housing Scheme (1974) Budha Haathi Park Development (1980) Chitwapur commercial complex (1982) Gomati Nagar Housing Scheme (1983) Nobo Bagh Scheme (1985) Kailash Kunj Scheme	To cope with housing shortage. Improve environmental conditions. To decentralise the commerce and office space from the centre of the city. To cope with the housing shortage. To convert wasteland into open space. To create commercial employment activities for economically weaker section.
Gorakhpur Development Authority, (1977)	Implementation of housing schemes for H.I.G., L.I.G., and E.W.S. Encouragement of housing societies Preparation of Transport Nagar Scheme. Preparation of World Bank sponsored self service scheme (1984).	To cope with the problem of housing and transportation.
16. West Bengal		
Haldia Development Authority, (1978)	Establishment of the Authority (1978) Authority became a statutory body, (1980).	For planned development. Need for a statutory power.

Source : Survey conducted by the authors of this study 1987.



Table 4-1—State Legislations relating to Urban Development Planning in India

Area Level	Act Name and Year
(A) States	
1. Andhra Pradesh	(i) The Andhra Pradesh (Andhra area) Town Planning Act, 1920. (ii) The Andhra Pradesh Urban Areas Development Act, 1975. (iii) The Andhra Pradesh Slum Improvement (Acquisition of Land) Act, 1956.
2. Assam	(i) The Assam Town and Country Planning Act, 1959. (ii) The Assam Slum Areas (Improvement and Clearance) Act, 1959.
3. Bihar	(i) The Bihar Town Planning and Improvement Trust Act, 1975. (ii) The Bihar Regional Development Authority Act, 1951. (iii) The Chotanagpur and Santhal Parganas Autonomous Authorities Act, 1971. (iv) The Bihar Restriction of Use of Land Act, 1948.
4. Gujarat	(i) The Gujarat Town Planning and Development Act, 1976. (ii) The Gujarat Slum (Improvement/Clearance/Re-development) Act, 1973.
5. Haryana	(i) The Faridabad Complex Development and Regulation Act, 1971. (ii) The Haryana Development and Regulation of Urban Areas Act, 1975. (iii) The Punjab Improvement Act, 1922. (iv) The Haryana Urban Development Authority Act, 1977. (v) The Punjab New Mandies Township (Development and Regulation) Act, 1960. (vi) The Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963.
6. Himachal Pradesh	(i) The Himachal Pradesh Town and Country Planning Act, 1977.
7. Jammu & Kashmir	(i) The Jammu & Kashmir Town Planning Act, 1963. (ii) The Jammu & Kashmir Development Act, 1963. (iii) The Jammu & Kashmir Town Area Act. (iv) The Jammu & Kashmir Prevention of Ribbon Development Act, 1950.
8. Karnataka	(i) The City of Mysore Improvement Act, 1903. (ii) The Karnataka Town and Country Planning Act, 1961. (iii) The Karnataka Improvement Boards Act, 1976. (iv) The Bangalore Development Authority Act, 1976. (v) The Karnataka Slum Areas (Clearance and Improvement) Act, 1973.
9. Kerala	(i) The Travancore Town Planning Act, 1932. (ii) The Travancore Town and Country Planning Act, 1945. (iii) The Madras Town Planning Act, 1920. (iv) The Guruvayur Township Act, 1961.
10. Madhya Pradesh	(i) The M.P. Town Improvement Trusts Act, 1960. (ii) The M.P. Slum Improvement (Acquisition of Land) Act, 1956. (iii) The M.P. Regulation of Use of Land Act, 1948. (iv) The M.P. Town (Periphery) Control Act, 1960.
11. Maharashtra	(i) The Maharashtra Regional and Town Planning Act, 1966. (ii) The Maharashtra Housing and Area Development Act, 1976. (iii) The Bombay Metropolitan Region Development Authority Act, 1974. (iv) The Maharashtra Slum Areas (Improvement Clearance and Redevelopment) Act, 1971.

1	2	3
12.	Manipur	(i) The Manipur Town and Country Planning Act, 1975.
13.	Meghalaya	(i) The Assam Town and Country Planning Act, 1959.
14.	Nagaland	(i) The Nagaland Town and Country Planning Act, 1966.
15.	Orissa	(i) The Orissa Town Planning and Improvement Trust Act, 1956.
16.	Punjab	(i) The Punjab Town Improvement Act, 1922. (ii) The Punjab Development of Damaged Areas Act, 1951. (iii) The Punjab Slum Areas (Improvement and Clearance) Act, 1961. (iv) The Punjab Urban Estates (Development and Regulation) Act, 1964. (v) The Punjab Scheduled Roads and Controlled Areas (Restriction of unregulated Development) Act, 1963. (vi) The Punjab Regulation of Colonies Act, 1975. (vii) The Capital of Punjab (Development and Regulation) Act, 1956. (viii) The Punjab New Capital (Periphery) Control Act, 1952. (ix) The Punjab Nangal Township (Periphery) Control Act, 1958. (x) The Punjab Talwara Township (Periphery) Control Act, 1961.
17.	Rajasthan	(i) The Rajasthan Urban Improvement Act, 1959.
18.	Tamil Nadu	(i) The Tamil Nadu Town and Country Planning Act, 1971. (ii) The Tamil Nadu Slum Clearance and Improvement (Acquisition of Land) Act, 1959. (iii) Tamil Nadu Slum Areas (Improvement and Clearance) Act, 1971. (iv) The Tamil Nadu Parks, Playfields and Open Spaces (Preservation and Regulation) Act, 1960. (v) The Tamil Nadu Urban Land Tax Act, 1966.
19.	Tripura	(i) The Tripura Town and Country Planning Act, 1973.
20.	Uttar Pradesh	(i) The U. P. Urban Planning and Development Act, 1973. (ii) The U. P. Slum Area (Improvement and Clearance) Act, 1962. (iii) The U. P. (Regulation of Building Operations) Act, 1958. (iv) The U. P. Roadside Land Control Act, 1945
21.	West Bengal	(i) The West Bengal Town and Country (Planning and Development) Act, 1979. (ii) The Calcutta Metropolitan Development Authority Act, 1972 (repealed) (iii) The Durgapur (Development and Control of Building Operations) Act, 1958. (iv) The Calcutta Improvement Act, 1911. (v) The West Bengal and Development and Planning Act, 1948. (vi) The Howrah Improvement Act, 1956. (vii) The West Bengal Comprehensive Area Development Act, 1974. (viii) The West Bengal Slum Areas (Improvement and Clearance) Act, 1972. (ix) The Calcutta Metropolitan Water and Sanitation Authority Act, 1966. (x) The West Bengal Township (extension of civic amenities) Act, 1975. (xi) The Calcutta Metropolitan Planning Area (Use and Development of Land) Control Act, 1965 (repealed). (xii) The West Bengal Land (Requisition and Acquisition) Act, 1948.

B. Union Territories :

- | | |
|--|---|
| 1. Andaman and Nicobar Islands | There is no Planning Legislation in existance at present. |
| 2. Arunachal Pradesh | There is no Planning Legislation in existance at present. |
| 3. Chandigarh | (i) The Capital of Punjab (Development and Regulation) Act, 1952.
(ii) The Punjab Capital (Development and Regulation) Building Rules, 1952.
(iii) The Chandigarh (Sale of Sites) Rules, 1952.
(iv) The Chandigarh Tree Preservation Development Control Order, 1952.
(v) The Punjab New Capital (Periphery) Control Act, 1952. |
| 4. Dadar and Nagar Haveli | There is no Planning Legislation in existance at present. |
| 5. Delhi | (i) Delhi Development Act, 1957.
(ii) The Slum Areas (Improvement and Clearance) Act, 1956. |
| 6. Goa, Daman & Diu | (i) The Goa, Daman & Diu Town and Country Planning Act, 1974. |
| 7. Pondicherry | (i) Pondicherry Town and Country Planning Act, 1969. |

(C) Environmental Laws in India**Directly Related Acts :**

- (i) The Water (Prevention and Control of Pollution) Act, 1974.
- (ii) The Water (Prevention and Control of Pollution) Cess. Act, 1977.
- (iii) The Water (Prevention and Control of Pollution) Cess. Rules, 1978.
- (iv) The Air (Prevention and Control of Pollution) Act, 1981.
- (v) The Indian Forest Act, 1927.
- (vi) The Forest (Conservation) Act, 1980.
- (vii) The Wild Life (Protection) Act, 1972.

General Acts

- (i) The Indian Penal Code, 1860 which deals with water pollution, atmosphere pollution and general pollution.
- (ii) The Code of Criminal Procedure, 1973.
- (iii) The Police Act, 1861.
- (iv) The code of civil procedure, 1908.

Special Laws

- (i) The Factories Act, 1948.
- (ii) The Insecticides Act, 1968.
- (iii) The Motor Vehicle Act, 1939.



Table 5.1 Main Functions and Linkages of Urban Planning Related Institutions

Agencies Related to Urban Planning by State	Main Functions	Linkages with the State/Divisional Town Planning Departments
1	2	3
1. Andhra Pradesh		
Hyderabad Urban Development Authority	Planning and Development of Hyderabad Planning area	The Director of Town and Country Planning, a member
Quli Qutab Shah Urban Development Authority, Hyderabad.	Planning and Development of old city and of Hyderabad	The Senior Joint Director, a member
Vishakhapatnam Urban Development Authority, Vishakhapatnam.	Planning and Development of Visakhapatnam, Vizianagar, and Anakapalle Planning areas.	---
Vijayawada-Guntur-Tenali Urban Development Authority, Vijayawada.	Planning and Development of Vijayawada, Guntur and Tenali Planning areas.	---
Kakatiya Urban Development Authority, Warangal.	Planning and Development of Warangal Planning area.	---
Tirupati Urban Development Authority, Tirupati.	Planning and Development of Tirupati Planning area.	---
Municipal Councils	---	The Director Advisory Member
Municipal Corporations of Hyderabad, Vishakhapatnam, and Vijaywada.	---	Do.
2. Bihar		
Regional Development Authorities (5)	To prepare Master Plan	The Chief Town Planner is a member of the Authority and renders Technical advice.
Town Planning Authorities (10)	Do.	An officer from nearest office
Coal Mining Areas Development Authority	To prepare Master Plan for all round development falling within its jurisdiction.	
Iatas, Bokaro, HEC and Mica, all Industrial urban development concerns.	To prepare Urban Planning schemes	---
3. Goa		
Panaji PDA	Planning and Development Control	Autonomous Body functioning under the provision of T. & C.P. Act, 1974
Momangao PDA	Do.	Do.
Southern PDA	Do.	Do.
4. Gujarat		
Urban Development Authorities (4)	Town Planning and Development	Chief Town Planner as member of the Authority.
Area Development Authorities (113)	Do.	Do.
5. Haryana		
Haryana Urban Development Authority	As per the Acts	Advisory capacity
Haryana Housing Board	Do.	Do.
Municipal Committees	Do.	Do.
Improvement Trusts	Do.	Do.
Haryana Agricultural and Marketing Board	Do.	Do.

1	2	3
6. Maharashtra		
Maharashtra Housing and Area Development Authority	Area and Housing Development	A Member Advises Government on Development Control in BMR
City and Industrial Development Corporation Limited.	Land acquisition area development and disposal of land and housing in notified areas.	Advising Government on Planning city and industrial estates.
Nagpur Improvement Trust	Area Development and Development Control.	---
Maharashtra Industrial Development Corporation	Area Development, establishing Industrial Estates in backward areas or balanced regional development.	Assisting Nagpur Improvement Trust for preparation of statutory Plans.
Pimpri Chinchwad New Town Development Authority	Land acquisition area development and disposal of land and housing.	Deputy Director of Town Planning as advisory member.
7. Manipur		
Planning and Development Authority	To Implement Master Plan for Greater Imphal and Development Projects like IDSMT and Slum Improvement Schemes.	Monitoring and Co-ordinating the Planning works.
8. Mizoram		
PWD Govt. of Mizoram	Construction and maintenance of PWD roads intra and inter linkages, etc.	---
Settlements and land records Department	Allotment of land, revenue and land records construction of market places, house site plan, town extension plan.	---
Local Administration Department	Town beautification, public housing construction of swimming pools, roads, step retaining walls and local admin.	Town and Country Planning Department under Directorate of Local Administration.
9. Nagaland		
Development Authority, Nagaland.	Implementation of Commercial complexes	Plan preparation and Financial assistance from TPO
10. Punjab		
Punjab Housing Development Board	To provide built up houses	In relation to IDSMT and other schemes.
Improvement Trusts (28)	Land Development Programme	Do.
Municipal Corporations/Committees	Provision of infra-structure facilities	Under IDSMT schemes EIUS programme Low Cost Sanitation and Traffic Operation Plans.
Housing and Urban Development Department	To set up residential Urban Estates	Under IDSMT and other schemes
Punjab Small Industrial Development Corporation	Development of Industrial Estates	Do.
Punjab Water Supply and Sewerage Board	Provision of Water Supply & Sewerage	Do.
Public Works Department	Development of Major Roads and Infrastructure.	Do.

1	2	3
11. Rajasthan		
Rajasthan Housing Board	Housing construction	—
Rajasthan Industrial Investment Corporation	Planning of industrial areas	—
Jaipur Development Authority	Planning for JDA areas	—
Urban Improvement Trusts (9)	Planning for UIT areas.	—
Municipalities (199)	Planning and Maintenance of services	—
Rajasthan Area Marketing Board	Planning for Mandies	—
Notified Area Committees and Cantonment Boards (9)	Maintenance of notified areas	—
12. Tamil Nadu		
Tamil Nadu State Housing Board	Housing Development in Layouts approved by TCP	Layouts approved by Town Planning Departments
Tamil Nadu Slum Clearance Board	Clearance and Improvement of Slum	—
State Planning Commission	Preparing of Annual Plans	—
13. Uttar Pradesh		
U.P. Housing and Development Board	Development of area for Housing	Chief Town & Country Planner (CTCP) as a Technical Member
Development Authorities (2)	Urban Development	Do.
U. P. Small Scale Industries Development Corporation	Development of Industrial Areas	Do.

Source : Survey conducted by authors of this study, 1987.



TABLE 5.2 Changing Functions of Town Planning Departments

S. No.	Name of the Organisation and State	Statutory Functions	Functions taken up at initial Stage	Functions being performed now	Functions expected during 7th Five Year Plan
1	2	3	4	5	6
1.	Town and Country Planning Organisation, Bihar	Preparation of Master Plans for different towns for their development in a planned manner and check their haphazard growth. Detailed layout plans of residential, commercial, industrial and recreational areas. Tender advice on the land use planning and control. Tender advice on planning implications under Bihar Restriction of Uses of land (B.H.U.L. Act), 1948.	Preparation of Master Plan for priority towns Design of agricultural market yards in selected towns	Tender advice to the five regional development Authorities : Patna, Ranchi, Gaya, Muzaffarpur and Dhanbad areas. Tender planning advice to both local bodies and prepare development plans for them. Prepare project reports for S.M.T. schemes and monitoring the works Preparation of environmental improvement plans for the slum areas and monitoring the works Preparation of project for works to be executed in cooperation with UNICEF and the Govt. of India, included here also the Urban Basic Services Projects in twelve towns of Patna district. Preparation of project reports for the development of the towns under the Ganga action plan. Technical advices in issuing licences for construction of cinema halls, preparation of project reports for the development of Tirupati, Nagar at Patna and Dhanbad and project such as construction of kiosks.	Integrated urban development of six towns with Siwan Kishan Ganj.
2.	Department of Town and Country Planning, Haryana.	Enforcement of Act No. 41 of 1960 and Act No. 8 of 1975, and Haryana Urban Development Authority Act, 1977. Other functions are providing service or in advisory capacity to other sister organisations under various acts.	Provide services to the local bodies such as municipal committees, improvement trust under the Acts 1911 and 1912 (town improvement Act 1912) which are supplement with the amalgamation of slum clearance Act and subsidised Industrial Housing Act etc.	Preparation of master plan of town under this central assistance programme.	Not available.



1	2	3	4	5	6
3. Town Planning Department, Nagaland.	Preparation of master plans/action area plans for urban area enforcement.		Preparation of master plans for all organisations.	Implementation of I.D.S.M.T. scheme.	NIL
4. Department of Town and Country Planning, Punjab.	NIL		Preparation of action plan for all organisations. Comprehensive city planning and development of Ludhiana, Jalandhar and Amritsar.	Town planning schemes. I.D.S.M.T. Schemes. Preparation of Traffic operations plans for cities and towns. Environmental improvement of urban slums. Schemes under International year of shelter for the homeless. Urban Basic services scheme under the UNICEF programme.	NIL
5. Town and Country Planning Department, Punjab	No statutory functions at present.		To prepare scheme of Govt. department and local bodies in urban sector.	Preparation of master plans for important cities and towns. Development programmes for major cities and towns. Preparation of schemes for improvement trusts, municipal corporations, municipal committees and colonisation and urban staff department.	NIL
6. Town Planning and Valuation Department, Gujarat.	No specific statutory functions : The Department plays only an advisory role. Conduct civic surveys and prepare master plans for various town and cities. To assist municipalities and improvement trusts in the preparation of Town Planning schemes.		Preparation of draft Town Planning schemes and valuation of land. Monitoring I.D.S.M.T. projects.	Integrated development plans of community development blocks. Preparation of draft development plans and other projects.	NIL
7. Town Planning Department, Rajasthan.	To advise local bodies with regard to sub-division of land. To tender advice on preparation of slum clearance scheme Advise the local bodies with regard to the zoning of land.		Preparation of regional plans for Rajasthan Canal area. Preparation of Urban conservation plan. Setting up of urban information system.	—	Preparation of State physical plan. Preparation of regional plan. Implementation of town planning schemes.

To advise matters relating to acquisition of land, compensation, betterment, reconstitution of land and other technical and non-technical functions.

To approve building plans of local bodies for construction of residential buildings, markets etc. Out of the grants and loans sanctioned by the Government.

To frame building bye-laws for the guidance of local bodies and to advise the government for amendment or addition to the building bye-laws enforced.

To keep a watch on the development and advise local bodies about steps to check haphazard development and to cope of faults rising being such cases to the notice of the Government.

To advise the Government about the extension of municipal boundaries.

To advise in respect of village planning and prepare development plans for villages if referred by the department concerned.

To advise Government on housing slum clearance and regional planning.

To scrutinise building permission cases and layout plans.

8. Town and Country Planning Department, Goa.

To perform functions under Town and Country Planning Act, 1976. Technical advice to municipal councils. Preparation of traffic and transportation plans. Implementation of the plans prepared now.

Technical guidelines to the district collector under land revenue code. Preparation of zoning plans for municipal areas and fast developing panchayat areas. Preparation of layouts for Housing Board.

Technical guidelines to selected Panchayat areas under the village Panchayat regulation (1962): I.Y.S.H. projects.

Development control, interim building bye-law and zoning regulation of 1965. I.D.S.M.T. for Panaji and Mormugao.

	3	4	5	6
9. Town Planning and Valuation Department, Maharashtra.	Preparation of outline development plans and comprehensive development plans. Implementation of the regional plan of Goa. Functions under Maharashtra Regional and Town Planning Act, 1986; preparation of regional plans, preparation of development plans for municipal councils/corporations, preparation of town planning schemes for municipal councils of the corporation, rendering advice for planning and development control, in the areas of new Town Development Authority, of the Special Planning Authority to advise the municipal councils about land acquisition. Functions under Bombay Metropolitan Region Development Authority Act, 1974; advise the Government about development control in Bombay Metropolitan Region. Functions under Maharashtra Housing and Area Development Authority Act 1976; advise Maharashtra Housing and Area Development Authority about planning and related matters. Maharashtra land revenue code-1966, advise collector in connection with planning and development control in area lying outside the municipal council and preparation of lay-outs for urban and rural areas, village sites and village extension. Under Urban Land Ceiling and Regulation Act; advise competent Authority about valuation of urban land. Under Land Acquisition Act, 1894 and Stamp Act 1958 provide input assistance in valuation for land acquisition and valuation of stamp duty.	Western Ghats area development. E.I.U.S. Eco-control and eco-development. Execution and monitoring of works under development plans. Releasing financial assistance to municipal councils for implementation of development plans. Identification, preparation, formulation and implementation of I.D.S.M.T. projects. Advise local Authorities about acquiring of land for road widening and other public purposes. Valuation of land required for acquisition. Preparation of lay-outs for urban and rural areas.	Preparation of town planning schemes for local Authority. Advise local Authorities about acquiring of land for road widening and other public purposes. Valuation of land required for acquisition. Preparation of lay-outs for urban and rural areas.	Integration of special planning and environmental planning. Use of latest technology such as remote sensing for preparation of base maps, land use maps etc. and use of computer based data system. Accord sanction to and later, if required allow for minor modifications and deletions with respect to town planning schemes and development plans of B and C class municipal councils and non-municipal councils. Research work in respect of urban planning and urban development.

10. Town Planning Department, Manipur.
- Preparation of Master Plans Development Plans/Sectoral Schemes.
- Preparation of Master Plans towns and IDsMT Schemes.
- Preparation of Master Plan for new capital of Manipur and other sectoral plans.
- Development control functions like land allotment cases and examination of building plans forwarded by the Municipal Board.
- Preparation of schemes for improvement of slums.
11. Town and Country Planning Office, Mizoram.
- No statutory functions in Mizoram Town and Country Planning Bill 1987 is in the process of being finalised village/town level development plans and sanction of works is undertaken in advisory capacity.
- Mainly engineering functions performed by Town Planning staff for the Public Works Department.
- Physical Development Plans for villages and towns and resettlement plans for villages.
- Town and Country Planning Act likely to be passed giving statutory powers to the Department.
- Setting of regional offices in the districts of Mizoram during 1988-89.
12. Directorate of Town and Country Planning, Meghalaya.
- Planning and development of towns and villages.
- Planning and development of towns and villages.
- Consultancy functions for the Shillong Municipality local authorities and other government departments.
13. Town and Country Planning Department, Uttar Pradesh.
- Prepare Master Plan for various towns.
- To advise/comment about implementation of urban development and housing schemes.
- Assist the Government with regard to formulation of bye-laws relating to urban planning and development.
- Prepare layout plans and zonal development plans for development authorities, local bodies and corporations.
- Assist the State Government and competent authorities with regard to implementation of ULCAR Act, 1976.
- To prepare standard design of various categories of houses for LIG, MIG and EWS.
- Assist controlling authorities with regard to control of urban development.
- Scrutinise housing and urban development projects of local bodies for release of financial assistance from the Government.
- To monitor housing and urban development projects executed by local bodies, and recommend the State Govt. for release of finance.

1	2	3	4	5	6
			To provide technical assistance to local bodies and development agencies in the field of housing and urban development. To assist the State Government in formulation of annual and five year plans for housing and urban development. To prepare regional plans for various regions in the State.		
14.	Town and Country Planning Department, Government of Andhra Pradesh.	To prepare master plans for towns on behalf of municipal councils. Enforcement of zoning regulations of master plans and towns planning schemes. To prepare layout and design of buildings in accordance with the relevant town planning acts. Implementation of building rules. Subdivision of land approval of assignments and allocations, approval of industrial commercial and residential areas within municipality Approval of installation and layouts in panchayat areas. Give opinions about the location of cinema houses Liaison with all urban development authorities in respect of their schemes/projects	To guide municipalities to take up town planning schemes; Technical scrutiny of all housing schemes including Environmental improvement schemes taken up by municipal councils. Formulation of projects under the Central Scheme of IDSMT and monitoring the approved projects. Preparation of master plan for all the Mandal Headquarters.		
15.	Directorate of Town and Country Planning, Madras.	Regulatory functions; Building regulations, interpretations of acts and rules, layout of land for housing and enforcement of zoning regulations. Preparation of detailed development plans for specific areas, master plans and regional plans. Monitoring of IDSMT and IDUP Planning of disaster prone areas. Approval of layout plans prepared by Tamil Nadu for Housing Board areas outside Madras Metropolitan Areas.	Preparation of town planning schemes for municipalities Preparation of master plan, regional plans, IDSMT and IDUP Schemes; Use of remote sensing techniques for Map making and data collection. Setting up of computer based information system. Monitoring of projects.		

TABLE 5.3 : CHANGING FUNCTIONS OF DEVELOPMENT AUTHORITIES

S. No.	Name of State/Organisation	Statutory Functions	Functions taken up at initial stage	Functions being performed now	Functions expected during 7th Five Year Plan
1	2	3	4	5	6
1.	Urban Development Authorities, Gujarat	Preparation of development plans under Gujarat Town Planning and Urban Development Act 1976 for the urban development areas of the commercial city/towns. Preparation of town planning schemes, if so directed by the State Government. To control the development activities in accordance with the development plan. To execute work in connection with supply of water disposal of sewerage and provision of other services and amenities. To guide, direct, and assist the local authority or authorities and other statutory authorities functioning in the urban development area in matters pertaining to carrying out any development works. To carry out any development works in the urban development area as may be assigned to it by the State Government from time to time.	Preparation of draft development plan for the concerned development area. Preparation of draft town planning schemes to control development activities.	Carry out survey and study for identification of growth centres and entering into contract with private consultants for preparation of master plans for growth centres. Carrying out survey for transportation study by consultant Site and services schemes, housing for EWS, LIG, MIG and HIG. Allotment of development plots to the general public, undertaking a transport nagar project. Scrutiny and sanction of development permission; Control of unauthorised construction.	Commercial area development for shops and offices and apartment blocks.
2.	Uttar Pradesh (i) Lucknow (ii) Gorakhpur (iii) Kanpur	To Regulate city development according to the master plan. Land acquisition, development and disposal to initiate new development in and around the city. Construction of housing colonies, commercial complexes, parks, roads and drains. Sanction of building plans (all types).	Preparation of zonal development plans. New area development schemes for residential colonies, commercial complexes and other facilities in and around the city. Sanction of commercial and residential area layout plans, and building plans.	Environmental improvement and development of old city areas. Initiation of improvement of basic amenities with the help of other concerned depts. EWS. Phased urban development projects with help of World Bank funding, beautification projects attracting tourists. Multi-storied building for offices, shops and residential flats.	Emphasis on upliftment of weaker section in society; Development of layout plan for sites and services for EWS.

1.	2.	3.	4.	5.	6.
3.	Delhi Development Authority	To promote and secure the development of Delhi according to plan.	Development and disposal of land.	Housing activity.	To acquire more land and supply of developed land for urbanisation.
				Management of Inter-state bus terminal.	Take up special projects like integrated freight complex and composite urban development schemes in urban extension areas.
4.	Madhya Pradesh (i) Indore (ii) Jabalpur	Preparation of schemes for implementation of development plan. Implementation of development schemes. Allotment of plots Acquisition of land for development and disposal for purposes to town expansion and public purposes such as development of housing, shopping centre, cultural centre, administrative centre, sports complex and other centres. Laying out of major roads bye-pass and other infrastructural facilities in the urban areas like bus terminals, transport nagar, timber complex and the like.	Preparation and implementation of the schemes in conformity with the development plan for the city. Development of housing schemes, construction of low cost houses.	Environmental improvement in slums.	Emphasis on construction of EWS quarters.
5.	Andhra Pradesh (i) Quli Qutab Shah Urban Development Authority, Old city of Hyderabad.	The Authority is registered under the Societies Act and constituted by the government order. The Society has power to borrow money and execute project but has no power to control development.	Extension of water supply lines. Provision of street lighting and improvement of power distribution. Improvement of civic system and sanitation programme.	Comprehensive and all round community development through programme such as coaching of children in various games and giving nutritious food. Training of employed youth, funding of a poly techniques and schools, schools for minorities. Renovations of old tombs and buildings of historical and architectural importance, Road widening programmes. Construction of ring road all around the city, Water supply schemes, Construction of stadium; Economical weaker section housing.	—

1	2	3	4	5	6
9.	Kerala Kottayam Palghat, Greater Kochin, Idduki	Preparation of town Planning Scheme. Implementation of town planning schemes Control of development activities on the basis of town planning schemes. Co-ordinating development schemes of various developmental agencies. Advance acquisition of land and development for various public purposes, such as development of parks and play grounds, commercial centres, and slum rehabilitation.	Implementation of detailed town planning schemes and few area development policies, with the framework of development plan proposals.	Housing with financial assistance by HUDCO for EWS, LIG, and MIG categories. Construction of shopping complexes mini markets, taxi stand and waiting sheds. Management of common hall and dormitories for Government staff. Planning for stadium/tourist park.	Housing development Development of town centre Provision of tourism infrastructure Communication and presentation of the natural setting and environmental improvement. Survey and investigation for roads and bridges. Construction of common centres. Development of urban utilities and services To organise and monitor an evaluation cell.

TABLE 5.4 : CHANGING FUNCTIONS OF OTHER DEVELOPMENT AUTHORITIES

S. No.	Name of Organisation and State	Statutory functions	Function taken up at initial stage	Functions being performed now	Functions expected during 7th Five Year Plan
1	2	3	4	5	6
1.	HUDCO, New Delhi	To prepare technical and financial assistance for housing of EWS and LIG groups. To provide technical and financial help for slum improvement and social infrastructure.	To appraise, scrutinize and suggest (if required) and modify the schemes received in HUDCO, for financial assistance.	To organise and conduct seminars, training courses, interactions workshops etc. for the personnel from different agencies through its newly set up Human Settlement Management Institute (1985).	To keep a computerised record of the projects received by HUDCO from architecture and town planning point of view.
2.	Uttar Pradesh Housing and Development Board, Lucknow.	To prepare layout plans for different housing areas. To scrutinize and sanction the plot sub-division and house plans followings within the boards jurisdictional area.	To prepare layout plans for housing areas.	To prepare layout plans for transportation and other facilities within the housing areas under the Board.	
3.	Ahmedabad Municipal Corporation, Gujarat.	To prepare town planning schemes and development programmes. To exercise development control measures by—application of building byelaws town planning scheme regulation, zoning and building permission etc. To stop and remove illegal/unauthorised structures by enforcing relevant statutory provisions.	To prepare town planning schemes and development plans. To issue building permission Curbing illegal/unauthorised constructions.	To prepare project design. To formulate development proposals on the plots acquired for public purpose. To prepare area planning and development schemes for city centre, river front development schemes etc. To undertake slum upgradation programme. To undertake slum rehabilitation and relocation programmes. To prepare environmental improvement schemes. To formulate housing schemes and sites and services programmes.	
4.	Maharashtra Housing and Area Development Authority, Bombay.	To prepare or direct the boards to prepare and execute proposals, plans or projects related to housing and area development.	To prepare a development plan and its implementation for Shetapur.		

1	3	4	5	6
		To prepare housing schemes for Boredi workers.		
	To manage all lands, houses and buildings or other properties vested in or belonging to the authority.	To prepare affordable low income shelter programme.		
	To approve proposals plans projects prepared by board.	To prepare slum upgration plan in major cities in the State.		
	To lay down policy regarding disposal of developed sites and housing tenements.			
	To provide loan to public to enable them to purchase plot/tenement developed/constructed by the Authority.			
	To exercise such legal powers as may be necessary to discharge its functions and performing its duties under the act.			
5. Pune Municipal Corporation, Mahara	To prepare development plan, to issue building permission, to organise building construction to look after drainage and water supply in the town.	To prepare development plan of pune city.	Implementation of the schemes as provided in the sanctioned development plan.	
		To prepare town planning schemes	To prepare housing scheme for EWS	
		To exercise development control rules and to grant building permission.		
6. Nagpur Improvement Trust, Mahara	Preparation of general improvement schemes.	Acquisition of land		
	Providing housing sites.	Preparation of plans/schemes		
	Widening of roads.	Preparation of development plan Nagpur.		
7. Rajashtan Housing Board	Preparation of housing schemes. commercial cum residential scheme, urban renewal including slum clearance and slum improvement projects. industrial housing schemes.	Housings schemes for selected cities in the State.	Designing of public buildings	Housing planning for different Govt. agencies.

TABLE 5.5 Structure of some Urban Planning and development Agencies, 1987

Name of Organisation and State	Main Types of Jobs Being Done	Broad Categories of Employment Number	Details of Regional Office			
			Name	Broad Category	Jobs Being Done	
1	2	3	4	5	6	
Tinsukhia Devl. Authority, Tinsukhia, Assam.	Enforcement of master plan programmes and zoning regulations and preparation of T.P. schemes within Master Plans area.	T.P. —1 Overscar and Surveyor —5 Drawing section —6 Office staff —3	Patna	T.P. Drafting section —8 Survey section —15	To assist Chief Town Planner To do drawing work To do survey work	
T.C.P.O. Bihar, Patna.	Preparation of master plans, enforcing planning controls, designing of agri. market-yards.	T.P. —24 Survey section —66 Drafting section —41	Muzaffarpur	T.P. Drafting section —8	To assist Chief Town Planner To do drawing work	
Town, Country and Valuation Department, Hyderabad.		Office of Deputy Town Planner, Nadiad	Ranchi	T.P. Drafting section —6 Survey section —17	To assist Chief Town Planner To do drawing work	
Ahmedabad Municipal Corporation.	Preparation of town planning schemes, development plans, Monitoring the implementation, Exercising development controls.	Inspector —7 Sub-Inspector —26 —25 Nil	Office of Deputy Town Planner, Surendranagar	T.P. P.A. Surveyor —4 Drafts man —6 Office staff —8		
Town and Valuation Department, Maharashtra.	Planning and Valuation	T.P. —329	Bombay	T.P. Technical drawing	Scrutiny of plans, town planning schemes Implementation and monitoring	
		Research Cell —61	New Bombay			
		Drawing staff —198 Office staff —288	Pune Nagpur			

1	2	3	4	5	6
Town Planning Department, Manipur.	Conducting physical survey and preparation of base maps, preparation of master plan, dev. plan, T. P. schemes carrying out land use surveys, socio-economic surveys etc.	T. P. Engineers Architects Research section Surveyors Office staff		No Regional Office	
Town and Country Planning, Meghalaya, Shillong.	Preparation of town planning schemes, environmental planning conserving public health safety, etc.	T. P. Architects Engineers P.A. Research Wing Surveyors Office	District Town Planning Unit, E. Khasi Hills, Shillong	T. P. P. A.	—1 Planning and acquisition of development works —1
Department of T.C.P. Punjab.	Comprehensive City Planning and Development of Ludhiana, Jalandhar and Amritsar. Preparation of Integrated Block Development Plans, Urbanisation, Research Plans and Design Studies not yet undertaken.	T. P. Engineers Urban Economist Establishment Officer	W. Garo Hills, Tura Janita Hills, Jowai Chandigarh Hoshiarpur	P. A. P. A. Area Planners T. P. Do.	—1 Do. —1 Do. —1 Preparation of Integrated Block Development Plan. 3 Do.
Mahe, Planning Authority, Pondicherry		Chairman, I.A.S. Member Secretary T. P. Assistant T. P. Architects Drawing section			
Rajasthan Housing Board	Planning at sector level and spot level, Architectural designing and documents, Building plans and site plan. As defined by the Government under order No. 118302 (8) IA/60 dt. 3-5-60.	T. P. Engineers Architects Drawing section	Kota Bikaner Udaipur Jodhpur Ajmer Rohtak Panchkula Ambala Kurukshetra Karnal Sonapat Faridabad Gurgaon Jind Bhiwani Rewari Hissar Sirsa Chandigarh	T. P. T. P. T. P. T. P. T. P. T. P. T. P. T. P. T. P. T. P. T. P.	—3 All Regional Offices prepare master plans, sector plans —3 —3 —3 —2 —1 —1 —1 —1 —1 —1 —1 —1 —1
Town Planning Department, Rajasthan					
Department of T.C.P. Haryana	Enforcing planning controls. Advisory capacity to sister organisations	Director IAS Joint Director T. P. Regional Planners			

T. P. Department, Nagaland	Preparation of master plans, action plans, implementing IDSMT Schemes.	T.P. Engineers	—11 —4	Dimapur Mokokchung Tuensang Wokha Phek	T.P. Engineers Do. A.T.P. Do.	—2 —0 —1 —1 Do. Do.	Preparation and implementation of master plans.
Directorate of Town and Country Planning, Madras. (Tamil Nadu)	Preparation of master plans and layouts schemes for areas outside Madras.	Director IAS T.P. Staff	—1 —4 —0		Details not given		
Madras Metropolitan Development Authority	Preparation of master plans, development plans, new town development.	V.C. IAS Member Secretary C.E. IAS T.P.	—1 —1 —1 —37				
Tamil Nadu Housing Board	Land acquisition for housing development.	T.P. Architect Survey section	—4 —4 —2	Regional offices at Madras, Trichy, Madurai, Salem, etc.			
Karnataka	Scrutiny of building	T.P. Draughtsman Others	—3 —6		Ex-Engineer	—1	
West Bengal	Preparing outline development, T.P. scheme and architectural drawings.	T.P. Staff	—1 —4	Not mentioned	Planning section	—5	
Gorakhpur Development Authority	Land acquisition, Taking up urban development projects.	V.C. IAS Secretary Project Officer Engineers Drawing section Surveyors Office Staff	—1 —1 —1 —20 —2 —1 —3				
Lucknow Development Authority	Regulating city's development, Initiating new development, Sanctioning layout plans. Environment improvement, Development of old city, slums etc.	T.P. Architect P.A. Draughtsman	—5 —1 —2 —8				
U.P. Housing and Development Board	Housing and Urban Development schemes (From 1 acre to 1000 acres).	Chief Arch. Planner Town Planners	—1 —24				

1	2	3	4	5	6
Delhi Development Authority, New Delhi	Housing, development and disposal of land for various uses like residential, industrial and institutional etc.	V.C. IAS T.P. Others	Not mentioned Not mentioned		
HUDCO, New Delhi	Project appraisal, design and development.	Chief Special projects Asst. Chief Sr. Appraisal Officers Training Officers	1 1 3 3		
U.P. Town Planning Department	To advise and assist Government on town planning and implementation of urban development and housing schemes. Prepare zonal plans developing housing sites (group housing) Technical assistance to development authorities. Evaluation and Monitoring of Projects in urban development and housing projects.	Not specified	Commissionary head-quarters	T.P. and related staff	Preparation of Master Plans and also enforcing Urban Controls
Kanpur Development Authority	Preparation of zonal plans housing layouts, slum improvement schemes, large scale land and land housing development.	T.P. Architect Assistants V.C. IAS	3 1 2 1		
Kollayam Development Authority	To achieve the objectives of master plan, T. P. Schemes and enforcing development controls.	Planners Engineers Administration	5 1 7		
Palghat Development Authority	Preparation of T.P. schemes, etc.	T.P. Surveyor Draftsman Chairman Chairman IAS Secretary IAS Regional Engineers Chief Accounts Officer Deputy Secretaries Office Staff	4 2 2 4 1 1 4 1 3 20		
Kerala State Housing Board, Trivandrum		Trivandrum Regional Engineer Cochin Regional Engineer Admn. Staff Admn. Staff Calicut Regional Engineer Admn. Staff	50 10 30 10 21 5		

Indore Development Authority, Madhya Pradesh	Preparation of schemes for the implementation of deve- lopment plan.	T.P.	- 2
		Drawing Section	20
Jabalpur Development Authority	Survey and demarcation of land, levelling and continuing land, preparation of layouts, estimation and valuation.	Ex. Engineer	- 1
		Architect	- 1
		Engineers	- 3
		Surveyors	- 3
		Drawing Section	---6
Greater Cochin Development Authority	Preparation and implementa- tion of DTP Schemes,	T.P.	- 9
	Preparation of projects for raising funds from financial agencies to undertake dev. activities.	L. Architect	- 1
		Drawing Section Staff	16 - 3
Idduki Development Authority	Preparation of layouts for various landuses, design of building and urban infra- structure, development control and environmental improvements.	Chairman IAS	- 1
		Secretary T.P.	- 1
		T.P.	---2
		Building Inspector	- 1
		Surveyors Office Staff	---3 - 2

Source:- Survey conducted by authors of this study, 1987.

Table 7-1 Urban Planning and Development Problems as Perceived by the State Agencies, 1987

Name of the State/Union Territory	Urban Planning	Urban Development
1	2	3
1. Andhra Pradesh	Absence of regional planning act. Lack of co-ordination among agencies in planning process. VUDA has no control over developments done by Port and steel plant. Overlapping of plans due to involvement of sectoral agencies in planning. Inadequate qualified planners and related staff. Poor future prospects and low status of planners and other staff. Interference/high handedness of other departments/agencies.	Tedious process of releasing funds for development process. Cumbersome land acquisition process. Non co-ordination among agencies
2. Assam	No revision of master plan due to legislative problems. Insufficient planning staff Lack of co-ordination among various agencies.	Slow implementation Lack of services in the city. Cumbersome land acquisition process.
3. Bihar	Lack of awareness in public Lack of qualified planners	Lack of co-ordination Poor economy Problems of transportation Non-implementation of master plans
4. Delhi	Lack of urban schemes for built-up areas. Non-formulation of integrated urban development schemes in the light of urban land policy for implementation.	Unauthorised development Non-availability of services in land for urbanisation
5. Goa		Less involvement of private investors in construction. Lack of adequate finance for implementation of regional/development plan.
6. Gujarat	Lack of qualified planners. Time consuming process of getting approval from Government. Lack of power in Gujarat Town Planning and Urban Development over other Acts. Lack of comprehensive land policy Lack of apex body for development works.	Lack of finance Poor management Poor financial position of development authorities. Lack of loan facilities to the authorities for development works Lack of powers to the authorities to collect taxes, fees, betterment levys etc. No contribution from local bodies in financing and development projects.
7. HUDCO, New Delhi	Different bye-laws in different states.	Difficulty in suggesting modifications schemes once it is approved by planning agency/local body.

1	2	3
8. Karnataka	Municipality of departments responsible for planning and related activities.	
9. Kerala	Unsuitable Town planning Act, amended Bill not yet passed by the State Government. Lack of Regional plan Lack of qualified planners and other related staff.	Lack of acquired land for development. Finance should be rooted through co-ordinating agency to the other related agencies to have some priorities. Lack of funds
10. Madhya Pradesh	Encroachments Non-preparation of zonal plans Absence of apex body for coordination among various different departments. Contradictory provision of different Acts for urban planning.	Cumbersome process of land acquisition. Litigation over land acquisition. Illegal colonisation in the name of co-operative societies. Encroachments and uncontrolled development by flow of rural population into cities. Lack of planning awareness among people as well as in agencies.
11. Maharashtra	Planning standards becoming too high compared to affordable planning criteria. Violation and non-enforcement of master plans. Unauthorised development Lack of qualified planner Lack of qualified planners	Lack of controls in enforcing legislation Financial scarcity Non acquisition of land for development works.
12. Manipur		Non acquisition of developable land Enforcement of public land Lack of statutory provisions and coordination among different departments.
13. Meghalaya	Absence of planning legislation Absence of comprehensive organisation policy.	Lack of co-ordination among various departments. Inadequate funds
14. Mizoram	Absence of suitable urban planning directorate/authority. Lack of qualified planners and other technical staff.	Undesirable constructions done by private developers Multiplicity of authorities
15. Nagaland	Lack of technical experts Lack of awareness in public.	Lack of resources Lack of co-ordination from related departments
16. Punjab	Absence of comprehensive town and country planning legislation. Absence of development authorities	
17. Rajasthan	Absence of comprehensive town planning act. Non-implementation of master plans Poor co-ordination in urban development programmes.	Difficult process of land acquisition No check on unauthorised and un-planned growth.

1	2	3
18. Tamil Nadu	Inadequate finance. Non-acquisition of land for development purposes. Imbalance in the hierarchy in the organisation Poor future prospects for qualified staff. Non-comprehension of planning by non-planners normally heading the planning departments/having decision making powers. Political pressure in changing the land uses for remunerative purposes and not for welfare of the people.	Combersome land acquisition process for development works. Lack of finance. Slow implementation. Lack of co-ordination among various agencies. Lack of acquired land. Acquisition in small pockets results dis-jointing of development plans.
19. Uttar Pradesh	Lack of qualified planners and related planning staff for preparation of town plans etc. Lack of statutory provision for the preparation of regional plans. Inadequate time for plan preparation. Non-involvement of planning department in overall decision making process.	A very weak planning section. Non co-ordination among various departments. Lack of agency and regulation for the maintenance of open space at master plan level. Standards facilities are too high which results in high cost and long delays in development.
20. West Bengal	Non-consultation by Calcutta Port Trust with planning agencies led to environmental pollution.	Lack of qualified planning and engineering staff.

Source : Survey conducted by the Authors of this Study in 1987.

Table 7-2—Improvements in Urban Planning and Development as suggested by State Agencies

Name of State/Union Territory	Improvement/Suggestions in Urban Planning	Improvement/Suggestions in Urban Development
1	2	3
1. Andhra Pradesh	Planner should control the frame-work of master plan and look after the implementation as per the master plan. Town planning section need to be strengthened and status of planners need to be enhanced. Development authority should be empowered by Act as monitoring agency and its representation should be in all planning departments operating in its jurisdiction. Different sectoral agencies should also be involved at the time of plan making. Development authority should act as co-ordination agency for different local bodies like Water Supply Development, PWD, Electricity Board, Municipality etc. Land Acquisition Act needs to be amended to make the acquisition simpler.	The allocation of funds should be made in consultation with development authority to different sectoral agencies keeping in mind the implementation of development plan. To finance urban development projects, an apex Urban Development Financial Corporation should be constituted. To improve the infrastructural needs of the area/city, the investment in the project should be through development authority. Adequate funds should be given to the development authority to take up developmental works.
2. Assam	Review of master plans should be done by authorities and they would be equipped with manpower to take up the review work. Proper monitoring and evaluation is needed for the plan and works done by the authority.	Financial assistance /seed capital need to be given to the development authorities so that the development works can be taken up.
3. Bihar	Adequate compensation should be given to the land owners whose land is acquired for development works.	Adequate funds should be given by the government to expedite the development work. Proper traffic management needs to be done on priority basis. The development authority should be given powers to act as controlling agency also.
4. Delhi	Modern town planning techniques to be used. The development plans should be project oriented. Effective monitoring is needed for plan implementation.	
5. Goa		Allocation of adequate funds needs to be done for development work

1	2	3
6. Gujarat	Town planning is highly technical field, therefore, qualified planners be appointed on all such posts. Full fledged directorate for (i) planning and development control (ii) implementation and engineering (iii) assessment, evaluation and estate management should be created. Regular refresher-cum-training courses should be arranged for staff engaged in town planning.	The Act should be suitably amended so that tribunals can be set for deciding the legal/judicial cases related to planning and development expeditiously. Land policy relating to Government land and surplus land, unused land (ceiling and regulation) Act need to be included. The process of appointing different agencies for implementation of projects need to be simplified.
7. Karnataka	Only qualified planners should be entrusted with planning and development works.	
8. Kerala		Powers to acquire vacant land, under utilised land and area with dilapidated structures should be given to development authorities to take up developmental works.
9. Madhya Pradesh	Approval should not be required in case of temporary structures.	
10. Maharashtra	Qualified planners should be entrusted with the job of area planning and town planning. Training/refresher courses should be arranged from time to time. Expenditure on town planning and area planning should be borne by the State and it should not be included in the project cost. More funds should be made available for planning. Ward offices should be opened and decentralisation of the department should be done. Powers to implement the development plan should be with the planners.	The legislation related to planning and land control needs to be identified. Development control rules should be simplified. State Government/Central Government should finance the schemes for economically weaker sections.
11. Manipur	Town Planning Department, Development Authorities and other local bodies needs to be equipped with qualified planners. The technical staff working in Town Planning Departments needs to be given education in town planning.	Land acquisition should be done in bulk for development works.
12. Meghalaya	Town Planning legislation is required to be formulated and enforced. Setting up of agencies for planning and development of different urban centres. Formulation of urbanisation policy for orderly development of urban areas. Administrative set-up of local bodies needs to be streamlined.	Adequate funds should be given for urban development.

1	2	3
13. Mizoram	A single agency should be responsible for planning, development and control of the funds for development works. Housing should be as one of the functions of development department.	
14. Nagaland	More qualified planners need to be posted.	Better coordination among other departments, agencies related to development is required.
15. Punjab	Urban and Regional Planning Act needs to be enforced properly. Comprehensive Town and Country Planning Legislation needs to be prepared to take up the enormous work of urban development at State, region and city level. All class-I cities should be equipped with development authorities.	More Urban and Regional Planning Department at State level and Planning Development Authorities at city level needs to be established.
16. Tamil Nadu	Town planner should be the over-all incharge for planning activities. More powers should be given to Planners and their status needs to be enhanced. Power to acquire land and prosecution should be given to development authorities.	The change of land use should not be permitted. Town Planner should have power to impose the Development Control Rules. Status of town planning section should be enhanced.
17. Uttar Pradesh	Better pay and facilities need to be given to persons working in the Department of Planning. Creation of Central cell for Planning and design of various schemes. Public involvement at the initial stage of scheme formulation is needed. Strengthening of planning departments need to be done.	Constant site supervision need to be done compulsory. Awareness programmes should be initiated for appreciation of developments in town. Encroachments/Violations should be demolished/checked at the initial stage. Planners should be given powers for hearing the cases/disputes related to town planning.
18. West Bengal	No industrial licence should be given without the permission of the Development Authority. All the Plan programmes need to be approved from Development Authority.	Development Authority should have an engineering cell.

SOURCE : Survey conducted by the authors of this Study in 1987.

EVOLUTION OF THE TOWN AND COUNTRY PLANNING ORGANISATION, NEW DELHI

The Town and Country Planning Organisation, a permanent unit concerned with physical planning, is the technical wing of the Ministry of Urban Development. In 1955, the Government of India set up the Town Planning Organisation (TPO) to prepare the Master Plan for Delhi. In 1957 another organisation, the Central Regional and Urban Planning Organisation (CRUPO) was established to evolve a plan for Delhi Region; to advise on the development of steel towns, river valley projects and other regional development projects; to advise State Governments and local bodies in the matter of urban and regional planning and to advise on the setting up of a framework within which town planning organisations and similar bodies could function in the country. After the completion of the work on Master Plan for Delhi, the TPO was merged with CRUPO in 1962 and the name of the organisation was changed to "Town and Country Planning Organisation" (TCPO).

Since then, the TCPO has been functioning in an advisory capacity to various ministries of Government of India through the Ministry of Urban Development; to the Planning Commission, and to State Governments and, in the process, initiating studies relating to emergent problems in urban and regional development being faced in the country. The starting point for undertaking a countrywide programme, for preparation of master plans for towns and cities, enactment of town planning legislations, setting up of town planning departments in the States and Union Territories and augmentation of facilities for education and training in the field of town and country planning in India was marked when the first conference of State Ministers for Town and Country Planning was organised by CRUPO in 1960.

The Third Five Year Plan, in the formulation of which CRUPO took an active part, recognised the need to embark upon a programme of planned urban and regional development and as a first step towards this goal, provided hundred percent financial assistance to the State Governments and Union Territories for the preparation of development plans for important cities and towns in the country covering State Capitals, new industrial centres, ports and metropolitan cities. The responsibility to provide the

needed technical service, coordination and research inputs to the State Governments in this direction was assumed by TCPO. The Third Plan also provided for the preparation of regional development plans for the more rapidly growing regions in the country like Damodar Valley, Dandakaranya, Bhakra Nangal, Rihand and Rajasthan Canal Region. TCPO directly took up the responsibility for preparing the regional development plans for inter-state regions like the National Capital Region and the South East Resource Region.

As a result of the efforts made by TCPO during the Third Five Year Plan, practically all the States and most of the Union Territories set up town planning departments and enacted town planning legislations within the framework of which the State planning departments, tried to promote planned development of cities, and towns and regions at different levels—such as district and taluka plans. TCPO also played a significant role in projecting Central Government Policy and Programmes in respect of spatial planning and development at urban, regional and sub-regional levels in the country during the Fourth, Fifth and Sixth Five Year Plans; for coordinating urban development activities and planning legislations with the State Town Planning Departments as well as for advising the Ministry of Urban Development and Planning Commission on all aspects of urbanisation and spatial planning problems and formulation of regional planning policy. In order to meet the growing concern for human environment and its proper management with a more comprehensive idea of patterns of living, TCPO has undertaken research studies covering basic development inputs, such as education and training, physical form and social cohesion in relation to urban form, influence of technological developments in Indian conditions, equity and efficiency criteria in the growth and operation of rural and urban system/systems approach to basic infrastructural development and like topics.

Within the ambit of past achievements, the role of TCPO has become that of an apex technical advisory and consultant organisation in the country in all matters concerning urban and regional development.

NB.: The note is prepared by Shri D.S. Meshram, Additional Chief Planner, TCPO, New Delhi. It highlights the stages how the TCPO has been growing with new functions. There is an implied lesson from the TCPO's experience that the scope of physical planning and its structure needs to be kept changing with new emerging situations in the different parts of the country.

The role and function of TCPO can thus be defined broadly in four distinct areas, namely, policy guidance, consultative services, project assistance and study, research and evaluation. These functions bring adequate feedback to bear upon policies and programmes to guide project execution.

The organisation presently functions as a department under the Ministry of Urban Development, Government of India, with a Chairman who is the Joint Secretary in the Ministry. A Chief Planner, who is a technical person, is the head of department and is assisted by officers drawn from various disciplines working as a team. To facilitate the work programme, the Organisation has been structured into two well-defined wings, namely the physical planning and the Socio-Economic Wing. The physical planning wing consists of a number of divisions, concerned with regional planning, integrated development of small and medium towns, development of metropolitan cities, traffic and transportation, consultancy work, environmental planning, and planning legislation, headed by technical experts qualified in urban planning, regional planning and assisted by a team of town planners, regional planners, architects, engineers, geographers, economists, sociologists, statisticians, landscape architects, etc. The socio-economic wing consists of economic planner, industrial planner and sociologist. The Research and Training Division of the organisation undertakes core research studies on various issues of current importance to serve as major input for policy formulation and planning. The core functions of the TCPO as approved by the Ministry of Urban Development are given in brief below.

- (i) Formulation of spatial planning policies and programmes at the National level. This would include inter-alia National Settlements (rural and urban) Policy, National Urbanisation Perspective, Industrial Location Policy and related programmes;
- (ii) Formulation and Planning of regional planning policies for areas of special interest.

importance and problems, such as hill area development, watershed area management, river valley schemes, resource area development, metropolitan area development—all these issues which cover more than one State;

- (iii) Co-ordinating and integrating major urban development projects both in Central and State Sectors including metropolitan areas;
- (iv) Formulation of policies for New Towns, their future expansion and undertaking studies on their impact. It also includes appraisal of spatial impact of major urban development projects including public sector industrial development projects;
- (v) Appraisal, evaluation and monitoring of urban projects at the state and national levels;
- (vi) Consultancy services and guidance for urban and regional planning;
- (vii) Formulation and collaboration with concerned agencies to promote environmental and urban conservation programmes, particularly for areas of historic architectural or environmental significance.
- (viii) Development and continuous review of planning techniques and standards relevant to the needs, assisting the development of appropriate regulatory and legislative measures.
- (ix) Interaction with international and inter-governmental agencies in matters relating to human settlements, urban development and environmental planning;
- (x) Evolving and developing urban regional information system;
- (xi) Undertaking applied research, evaluation and training programmes; and
- (xii) TCPO should be associated in the discussion of State Plans from spatial and economic view points.

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सत्यमेव जयते

Integration of Spatial and Economic Factors in the Planning Process



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सत्यमेव जयते

Preface

There is now growing realisation of the fact that a complete integrating of the economic and spatial factors in the planning process should be achieved for maximisation of benefits from planned development, so that national goals of economic growth and social justice could be secured in an effective manner. For this purpose, suitable mechanisms and procedures need to be devised in right earnest. Therefore, the decision of the National Commission on Urbanisation to sponsor such a study is a step in right direction. I am thankful to the Commission for giving me an opportunity to take up such an important task.

In this study, I have made an attempt to analyse the current practices and procedures being followed by the government at various levels and to suggest a framework which may facilitate the desired integration of economic and spatial planning.

I have received guidance in this work from a number of eminent experts and to each one of them I feel indebted. My special thanks are due to Dr. Rakesh Mohan, Prof. R. P. Misra, Sri Naresh Narad, Shri B. G. Fernandes, Shri Meshram and Shri B. N. Singh who were very kind to spare their valuable time to give their well considered views on the subject which provided me proper direction.

Lucknow

November, 1987

P. N. Sharma





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Summary of Findings and Recommendations

The Planning Process

1.01 The objectives of planning in India are derived from the Directive Principles of State Policy as set forth in the Constitution. In view of the federal structure of the country planning is done at the State and sub-state levels also. The process of plan formulation is divided into several stages and these are followed both at the national and State levels. The planning at district level is now emerging as a major component of this process. At the city and town level the preparation of master plans is taken up by the Town and Country Planning Departments on behalf of the local bodies in pursuance of statutory provisions. In spite of the fact that village is an important spatial unit there has been no programme for physical development of the village as such. There is growing realisation of the need of decentralised planning so that people's participation could be ensured in the process of plan formulation and implementation.

1.02 During the First and Second Five Year Plans the subject of urban development was not given its due place. Since the Third Five Year Plan there has been some emphasis on urban development and regional planning. However, this has been an isolated sectoral activity not organically linked with the national development planning.

1.03 An appraisal of the planning process shows that national planning has been dominated by sectoral approach and there has been hardly any thinking about the spatial/regional implications of economic development envisaged in the national development plans.

1.04 In a country as big as diverse as India national development should essentially take into account the regional dimensions. Balanced regional development is an essential condition for achieving the goal of social justice and political harmony for an integrated nation building.

National Policies

2.01 There has been very little by way of an explicit urban policy with the result that it has not been possible to link local level planning with national planning. The planning ideology has been heavily biased in favour of rural development. Urban development has been visualised as an altogether separate subject although both should be integrated for accelerated national development.

2.02 National economic policies have their own spatial effects which have not been kept into focus. Consequently, policy and programme interventions have been half-hearted, loosely coordinated to say the least, even counter-productive. There have been unintended spatial effects of national economic policies and the results achieved do not match the expectations.

2.03 Many of the functions, at the national and State levels, which have a direct bearing on urban and regional development are dealt with by different ministries, departments and agencies. This makes it difficult to ensure necessary synchronisation and coordination in time and space.

2.04 There has been lack of appreciation of the fact that all economic activities in combination produce a unified system of spatial economy, land use structure and circulation pattern. As a result of this, there is unplanned urbanisation and small towns emerge as growth centres which do not receive any attention in the beginning. This gives rise to an unbalanced regional development.

Existing Arrangements for Spatial Planning at the National Level

2.05 At present, there is no organisational arrangements at the national level to look after spatial

aspects of planning specifically. However, the organisations concerned with urban planning and development are the Planning Commission (Housing, Urban Development and Water Supply Division), Ministry of Urban Development and the Town and Country Planning Organisation. There are other ministries and organisations which have an important role in urban development. Each of these organisations have their own methods and systems of taking investment decisions. There is no mechanism for mutual coordination and consultation.

2.06 The Planning Commission decides the quantum of resources for urban development sector also. There is no rational basis for these allocations. Moreover, there is no coordinated picture available for allocations made in other sectors having a bearing on urban development. The existing Urban Development Division of the Planning Commission is not equipped fully to take up the analytical work involved in this.

2.07 The Ministry of Urban Development has little technical capabilities to deal with the gigantic tasks of policy making and coordination for urban development with various concerned ministries. Similarly, the Town and Country Planning Organisation which is a technical wing of the Ministry has also been assigned limited role of scrutiny of projects under IDSMT and monitoring of slum clearance schemes. The technical input required is not forthcoming from it.

State Level Planning—An Appraisal

2.08 Planning procedures followed at the State levels are almost similar to those adopted at the national. There is a State Planning Board/Commission which prepares State Five Year and Annual Plans within the framework given by the Central Planning Commission. At the State level also different working groups are constituted which include one for Housing and Urban Development Sector. Plan for urban development is prepared on the recommendations of this working group as is done in other sectors.

2.09. In the State Plans inter-sectoral integration is not achieved because, firstly, the interaction at the level of State Planning Commission is not organised regularly, secondly, the exercise of inter-sectoral integration is not done seriously and, lastly, the departments at the State level are guided more by their counterparts at the centre and they do not attach much importance to horizontal coordination.

2.10 The above points out to a deeper malady. The Working Groups at the Centre would more

influence rather than State Planning Department. Therefore, the so called autonomy given to states in preparing an integrated State Plan becomes rather meaningless since large part of urban development funds come through centrally sponsored schemes in which the State has little decision making.

2.11 In the State of Uttar Pradesh, there is a functional body of planning called State Planning Institute having area planning and perspective planning divisions amongst others. There is no coordination between Town and Country Planning Department and the State Planning Institute to work jointly for planning at the State and sub-state levels.

Regional Planning in Uttar Pradesh

2.12 As a part of the Centrally sponsored Scheme called Regional Planning Scheme in the Third Five Year Plan and Town and Country Planning Department in Uttar Pradesh took up the work of preparation of regional plans by identifying regions on its own. The State Planning Department divided the State into five economic regions. There was no connection between these two sets of regions. This work has continued after that. Since the Planning Department was not involved in this process, the regional plans prepared by the Town and Country Planning Department could never be implemented. The entire effort has been infructuous.

2.13 The regional plans prepared by TCPD also suffered from methodological deficiencies. In addition to the long time taken in their formulation, they did not show financial implications and proper phasing in the shape of concrete programmes and schemes. These could, therefore, not be integrated with State Plan.

District Level Planning

2.14 The State Planning Department has initiated a scheme of decentralised district planning since 1982-83. It has to be a spatially integrated plan but urban development does not occupy any place in the district sector schemes which have been disaggregated from the State sector schemes. Nor, urban indicators have included in the criteria for making districtwise allocations.

2.15 So far as the district planning methodology is concerned, the Planning Commission has suggested constitution of a district planning team for preparing an integrated area development plan for the district. In this team a geographer/cartographer is to be included for spatial planning. The Planning Commission has also offered central assistance to strengthen the district planning machinery. But the

State Government has not availed of this offer because it will have to bear the expenses after the central assistance ceases to flow. On the other hand the Town and Country Planning Department has established its divisional units with qualified town/regional planners who are engaged in preparation of plans for towns selected under IDSMT. The services of qualified town/regional planners could have very well been utilised for guiding the preparation of spatially integrated plans at the district levels and at the divisional levels. Lack of coordination and lack of awareness of spatial planning has resulted in under-utilisation of the available capabilities.

Status of Town Planning

2.16 The Town and Country Planning Department has been labelled as a department responsible and capable of merely urban planning. Its regional planning capabilities which are more important for State Planning have not been recognised.

2.17 No seriousness is attached to the recommendations made by the Working Group on Housing and Urban Development which are repeated plan after plan. The Group had suggested a number of functions for integrating economic and spatial planning at the State level. But these suggestions have gone unnoticed so far.

City Level Planning

2.18 Master plans for a large number of cities have been prepared by the TCPD. These plans, except doing the regulatory and control functions have not been linked with the State Plan. The master plans are only physical plans and do not indicate fiscal component and as such these cannot be integrated into the State Plan.

2.19 The State Secretariate Departments concerned with urban development have little planning capability. At least these do not have a comprehensive view of urban planning in the overall framework of State Planning.

Significance of Spatial Planning

3.01 There is now a growing realisation of the need of integrating economic and spatial planning. It is evident from the constitution of the National Commission on Urbanisation. In its interim report the Commission has pinpointed that urbanisation has a positive role to play in restructuring the Indian Economy over the next few decades. The Commission is of the view that programmes for rural development which enhance rural prosperity

must inevitably lead to even greater urbanisation. Therefore, there should be a policy for judicious deployment of investment in jobs and infra-structure in smaller growth centres effectively curbing the migration pattern for a balanced urbanisation.

3.02 Urban development should be conceived in a broader regional or spatial framework. This would mean, that effective planning for urban development should involve both the 'bottom up' and 'top-down' planning. In the 'bottom-up' sense the urban development should be built up from the smallest settlement and in the 'top-down' sense the policies and resources should percolate from national to the local level.

3.03 Spatial planning is, therefore, a necessary pre-condition for optimum utilisation of resources and deriving maximum possible benefits from economic planning. The common feature of integrating spatial and economic planning, as evident from the experience of countries which have attempted it, is that it can be done in three stages : (i) the first stage consists of assessing the potentialities of development in different fields and working out specific measures and programmes aimed at exploiting them, (ii) the second in preparation of a coordinated plan adapting the programmes of development in each sphere to the availability of finances, the aim here is the preparation of a physical plan for the whole country consisting of approved development projects; (iii) the third stage provided for implementing the comprehensive physical and its review and monitoring. In this process, it becomes possible to have a correct picture of the natural resources in the country.

3.04 Physical planning also helps in achieving inter and intra-sectoral integration. Such a physical plan if prepared in advance would function as a master plan for development linking the various developments both temporally and spatially.

3.05 There are various allocations in the plan under different sectors which are spent in urban areas. If these allocations are accounted for the expenditures incurred in urban development would be very substantial. These create large employment and an increased tempo of economic activities. These call for a proper policy of urban and regional development. Conclusively, integration of spatial and economic factors in the planning process is indispensable if the country wants to achieve the goals of planned development particularly to make optimum use of scarce resources.

Suggested Framework for Integration of Economic and Spatial Planning

4.01 In order to achieve integration of economic and spatial planning three things are needed :

- (i) Formulation of a national policy to provide for integrated economic and spatial planning;
- (ii) Devising a suitable mechanism.
- (iii) Ensuring the conditions for successful implementation of the above policy.

National Policy on Urban and Regional Development

4.02 The policy on urban and regional development should be guided by the principle of optimum utilisation of resources and simultaneously maintaining ecological balance. This policy should be oriented towards enabling an orderly transition from a predominantly agricultural and rural society to an increasingly urban society. The approach should be more economic than physical. The roles of towns and cities should be recognised in generating employment and incomes. Greater attention should be paid to creating those sub-structures in the economy which will bring about a rapid spread effect of the benefits of economic development as evenly as possible. Another guiding principle should be to strike a balance through physical planning between the renewable and non-renewable natural resources. Therefore, it should focus on conservation of environment and ecology.

Suggested National Level Mechanism

4.03 In a multi-level planning framework the instruments for integrating economic and spatial planning would be different in nature and kind at different levels. For example, at the national level, a national physical plan needs to be prepared to synchronise or integrate itself with the national development plan. But it will only be a broad outline since planning for many sectors is to be done at the State level. Nevertheless, the national physical plan will first of all provide a bench mark showing the current position of exploitation of renewable and non-renewable resources of the country. In the second stage, the developments resulting from different sectoral programmes would be superimposed on the original plan. This exercise would be repeated with every Annual and Five Year Plan. This plan should serve as a valuable aid to the planners in allocation of State-wise resources in a rational manner. It can serve as a better criteria for allocation of outlays to different States for reducing inter-state disparities. In this method the allocation of resources would be purely on a scientific

basis and political manoeuvrability will be reduced to the minimum.

4.04 The physical plans should be prepared at different levels and their nesting would be done at the national level. Thus, it would be possible to plan for urban development in regional context and within a planning region there would be no allocation to towns because of their size but more because of their functions and needs. The physical and investment plans can then be dovetailed at the regional level and fed into the State level plans which in turn can be coordinated with the national plans.

Impact of Projects

4.05 Appraisal of the large industrial projects should be done in the light of urban and spatial implications. The authorities implementing these projects should file 'Spatial Impact' or 'Urban Impact' statements before being presented before the Public Investment Board.

Institutional Arrangements

4.06 The existing organisations dealing with urban and regional development should be restructured to achieve, in an effective manner, the integration of economic and spatial factors in the planning process. In the Planning Commission whatever planning capabilities are available should be pooled together and then the deficiencies with regard to new functions should be made good. There are two allied divisions, i.e., Housing and Urban Development Division and Multi Level Planning Division. These should be merged into one and redesignated as Urban and Regional Planning Division.

4.07 This reinforced Urban and Regional Planning Division should be made responsible for formulating appropriate policies for translating national development programmes into spatial framework at various levels. This division will also be able to use the information provided by the perspective planning division and would have a collaborative role in preparing the technical paper at the time of preparation of Five Year Plans. It would also appraise the projects having urban and spatial effects. In this context, the implications of future urbanisation would need to be translated into necessary investments for different infrastructures.

4.08 The proposed Urban and Regional Planning Division should be provided with a multi-disciplinary team. It should have its own basic capabilities in perspective planning, project, formulation and appraisal, monitoring etc. although it can draw upon the expertise of other divisions as and when needed. This

division should be preferably headed by a regional planner of repute.

Ministry of Urban and Regional Development

4.09 The responsibility for more detailed urban planning should rest with the Ministry of Housing and Urban Development. This ministry should be redesignated as Ministry of Urban and Regional Development. It should be suitably strengthened for taking up the task of coordination with other ministries. This ministry will also be responsible for working out the detailed financial implications of projected Urbanisation while the Planning Commission would work out the main fiscal/investment implications and work them into the main plan frame.

4.10 It is suggested that physical planners should be inducted into the Ministry at least at the level of joint secretary. This would help in improving the technical planning capability of the ministry.

Town & Country Planning Organisation

4.11 The Town and Country Planning Organisation would have to be suitably strengthened as it will act as the main technical arm of the Ministry. TCPO will assist the Planning Commission and the Ministry in formulation of policies and evolving guidelines and planning methodologies for integrating economic and physical planning. It will also be responsible for preparation of a national physical plan, formulation and appraisal of regional development projects, monitoring and evaluation of urban and regional development programmes. Above all, it will assist the Urban and Regional Planning Division in preparation of the physical component of the national development plan.

4.12 For making the TCPO more effective it would be necessary to raise its status and restructure it. There should be Planner in Chief of the rank of additional secretary in the Government of India and three Chief Planners of the rank of joint secretary. These chief planners will be incharge of perspective planning, preparation of national physical plan and monitoring and evaluation respectively. Below it suitable multi disciplinary staff will have to be provided.

Planning cells in Ministries

4.13 It is suggested that physical planning cells headed by a professional planner of suitable status should be created in those ministries which spend substantial part of their outlays in urban areas creating regional development implications.

Planning Mechanism at State Levels

4.14 The Town and Country Planning Departments should work in close collaboration with the State Planning Departments or Boards. Similarly, the government departments dealing with urban development should be redesignated as urban and Regional Development Departments. These should be suitably strengthened by inducting professional planners at the level of joint secretary.

4.14 (a) The Town and Country Planning Department should be assigned functions relating to preparation of State Physical Plan, indicating priorities for industrial development preparation of regional plans within the State, assistance to State Planning Board in preparation of State Planning and assistance in preparation of integrated area development plans at the district and local levels.

4.15 The status of Town Planning Departments in the States is generally low and should be raised to the first category of departments.

Suggested Mechanism for Uttar Pradesh

4.16 For introducing the Spatial factors into the planning process changes in both the advisory and functional wings of the State Planning Commission should be made. In the advisory wing the Chief Town and Country Planner is already a member. But it would be useful to include at least two Mayors of Metropolitan Council (Nagar Mahapalika) and one Chairman of Municipal Board as members of the State Planning Commission.

4.17 At the functional level there should be an Urban and Regional Planning Division in the State Planning Institute by renaming the Area Planning Division. This division would work in close collaboration with the Town & Country Planning Department on the one hand and the Department of Urban and Regional Development on the other. Thus, all sectoral programmes would be planned keeping in view their regional implications.

District Level Planning

4.18 Presently, the Panchayati Raj institutions are not involved in district planning. But the government intends to transfer this work ultimately, to Zila Parishads. But till such time as this work is being done by the District Planning and Implementation Committee, representatives of urban local bodies should be included in it and the executive officer of municipal boards in the executive body of the above committee be included.

4.19 The State Physical Plan prepared by the Town and Country Planning Department would help the State Government in more rational distribution of districtwise outlays.

4.20 Spatial planning exercise should be undertaken at the district level and sub-district level covering all settlements starting from the village to the metropolitan areas. In this context the district spatial plan would relate physical development with economic development and achieve better inter-sectoral integration.

4.21 The State Government should appoint a physical planner in the district planning team as suggested by the Central Planning Commission. In the meantime, the divisional units of the Town and Country Planning Department should be utilised to prepare integrated area development plans at the district and sub-district levels.

4.22 In order to achieve urban-rural integration, towns with population of less than 10,000 should be treated as integral part of the district area for purposes of overall planning and implementation of development programmes in the district. It is also necessary to ensure that the funds provided for urban development sector are duly disaggregated on proportional basis for meeting the cost of urban services of such towns.

4.23 In the case of larger cities and metropolitan areas it would be better to treat them as separate entities. As a matter of fact, the coordination of district and metropolitan planning can be done by mutual representation of rural and urban local bodies with their presidents as members.

4.24 Small towns and urban local bodies are left out of the scope of programmes like IRDP, TRSEM etc. with the result that poorer classes belonging to these towns are denied the benefits of subsidy available to other similar persons. These should be included in the scope of programmes of poverty alleviation. Gujarat has already started the scheme of incentive grant to benefit urban areas.

4.25 Urban local bodies having a population of over 10,000 should be asked to prepare Annual and Five Year Plans within the framework of State Plan.

4.26 The small towns should be allocated funds from IRDP, NREP, RLEGP etc. to build up infrastructural items since they provide for backward and forward linkages and serve the poor. The building of infrastructure should be done after an outline master plan is prepared for it by the district planning team.

City/Town Level

4.27 The municipal bodies should be strengthened for taking care of planning needs of each town. Once the regional dimensions of State Plan are spelt out, the local town plan should be prepared in its framework.

4.28 Old methodology of preparing a master plan should be given up. City development plans should be prepared in conjunction with Annual and Five Year Plans of the State.

Institutional Finance for Urban Development

4.29 There is need of providing financial assistance to local bodies which should take up viable 'projects' and they should get assistance from Institutional finance. The establishment of a National Housing Bank and National Urban Infrastructure Development Finance Corporation as suggested by the Planning Commission should be expedited for this purpose.

Developing Planning Capabilities

4.30 The recommendation made by the Task Force on Housing and Urban Development regarding launching a central scheme for funding the development of new urban development planning capabilities should be accepted and the local bodies especially of smaller towns should be assisted to appoint qualified town planners on their staff.

Developing Information Systems

4.31 An Urban and Regional Information System should be developed for building up a systematic data base by conducting regular surveys on the pattern of CSO.

Training, Research and Orientation

5.01 Lack of realisation of the importance of spatial planning as a counterpart of economic planning is a constraint to integrated development. The general administrators, economists and social scientists, let alone, the political bosses have tended to assign little importance to spatial planning, while the regional planners have confined themselves largely to physical approach. The bringing of both these approaches together can be hardly over emphasised. For this training and orientation programmes are indispensable.

5.02 Training programmes should be devised for non-official and official functionaries. The training curriculum should be broad based and multidisciplinary. Special emphasis should be laid on training of non-officials, besides training programmes for policy makers, administrators, executives of public

and private sector undertakings and development functionaries working in different departments at different levels.

5.03 Joint training programmes should be organised for officials and non-officials, for example, Chairman of Local bodies and their Chief executive officers, ministers and their secretaries, members of parliament and legislatures and district level officers.

5.04 Since the role of non-officials is important in locational decisions, training will help in orienting them and formation of positive attitudes besides a good rapport with the officers who are working with them.

5.05 Separate training packages, modules and capsules should be carefully designed by a team of experts for different programmes and pretested before launching the programmes. Care should be taken that faulty programmes are not formulated otherwise the training may create negative attitudes.

5.06 A division should be established in the Planning Commission or Ministry to coordinate with the Directorate of Training, Department of Personnel and Administrative Reforms to look after the training needs in urban and regional planning.

5.07 Sufficient funds should be earmarked for training and applied research and resources from UGC, ICSSR etc. should be pooled. Planning Commission should provide for separate funds keeping in view a 15 years perspective.

5.08 For launching training programmes in urban and regional planning, a network of training institutions would be needed. The existing institutions like NIUA, Administrative Training Institutes, School of Planning, Institute of Town Planners should be utilised. They should act as nodal institutions and train the trainers. Training institutions should also be established subsequently at state levels also.

5.09 The broad areas of training should cover goals and objectives of urban and regional development and other areas and techniques required for sound practice of urban and regional planning. However, different topics should be covered for different trainees, keeping in view their background.

Research in Urban and Regional Planning

5.10 The techniques for integration of different aspects of economic and spatial planning for their integration are not yet fully developed. Applied research should be undertaken to evolve methodologies and techniques and their upgradation on the basis of feed back received from field practitioners.

5.11 Manuals and guidelines should be prepared by the concerned institutions of training and research for preparation of integrated plans and using of sophisticated tools on the basis of case studies and practical work.

5.12 Research activity should be expanded through the departments of geography, economics, sociology at selected universities to assist in developing multi disciplinary planning methodologies.

Planning Education

5.13 Facilities for planning education should be augmented and the education curriculum should be broad based so that sufficient number of qualified spatial planners are available for the new functions and for newly created positions as envisaged in this report.

5.14 Thought may be given to starting of undergraduate courses in planning.

5.15 The universities may be asked to introduce post-graduate courses in urban economics, urban/rural sociology, economic geography, regional planning. Ministry of Urban and Regional Development should take up this matter with UGC.

5.16 Centrally sponsored scheme for developing planning capabilities as recommended by the Task Force on Housing and Urban Development should be chalked out in details and be implemented early to provide incentives to local bodies which may depute their own officers for training as also notify their requirement to the Ministry of Urban and Regional Development regarding the placement of Town planners.

5.17 Institute of Town Planners should be asked to redesign its Associateship examination to up-date the curriculum and to make the programme more effective. It would help in augmentation of planning capabilities at different levels.

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The Planning Process

The objectives of India's planning and its social premises derive from 'the Directive Principles of State Policy' set forth in the Constitution. Among these 'Directive principles' are that :

'The State shall strive to promote the welfare of the people securing and protecting, as effectively as it may, a social order in which justice, social, economic and political shall inform all the institutions of national life.'

Further that —

'The State shall, in particular, direct its policy towards securing —

- (a) that the citizens, men and women equally, have the right to an adequate means of livelihood;
- (b) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good;
- (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment.'

Against the background of these Directive Principles the functions assigned to the Planning Commission were to —

1. make an assessment of the material, capital and human resources of the country including technical personnel and investigate the possibilities of augmenting such of these resources as are found to be deficient in relation to the nations requirements;
2. formulate a Plan for the most effective and balanced utilisation of the country's resources;
3. On a determination of priorities, define the stages in which the Plan should be carried

out and propose the allocation of resources for the due completion of each stage;

4. indicate the factors which are tending to retard economic development and determine the conditions which in view of the current social and political situation should be established for the successful execution of the Plan;
5. determine the nature of the machinery which will be necessary for securing the successful implementation of each stage of the Plan in all its aspects;
6. appraise from time to time the progress achieved in the execution of each stage of the Plan and recommend the adjustments of policy and measures that such appraisal may show to be necessary; and
7. make such interim or ancillary recommendations as appear to it to be appropriate either for facilitating the discharge of the duties assigned to it; or on a consideration of the prevailing economic conditions, current policies, measures and development programmes; or on an examination of such specific problems as may be referred to it for advice by Central or State Governments.'

In view of the federal structure of the country the state governments have a considerable stake both in planning and in implementation. The planning of agriculture, irrigation, power, industries and development of roads and road transport and minor ports falls within the scope of State plans. The Central Government is concerned with the planning of industries, railways, national highways, major ports, shipping, civil aviation and communications as well as with overall fiscal and monetary policies and the principal financial institutions.

In sectors in which it does not plan directly, the Central Government has still the responsibility of

incorporating the separate plans of States into national plans and therefore, of providing the premises and broad framework of policy for the plans of individual states.

The national plan comprises, on the one hand, the plans of the Central and State Government and on the other, plans for private sector and more specially, for the corporate sector. The national plan evolves gradually in a series of stages. The first stage is the consideration of the general approach to the formulation of Five Year plan. At this stage an attempt is made to suggest the directions in which, during the period of the plan, imbalances must be corrected or more intensive efforts ensured. Preliminary conclusions on these and related aspects are submitted by the Planning Commission to the Cabinet at the Centre and to the National Development Council.

The second stage consists in studies, not yet in too detail, which are intended to lead to the consideration of what may be described as the draft of a Memorandum on the physical content of the Five Year Plan. The inter-relationships and the broader dimensions of the Plan are studied within the Planning Commission. While these studies proceed the Planning Commission constitutes a series of working groups composed of its own specialists and those of the Ministries concerned at the Centre. The working groups review the performance of the economy in their respective fields assess progress in achieving the policy objectives outlined in the current and the preceding plans and point out deficiencies which may have been observed. As the working groups at the Centre begin their works, State Governments are also advised to constitute similar working groups of their own and arrangements are made for the working groups at the Centre and in the States to be in informal contact with one another.

On the basis of preliminary studies undertaken by the various groups the planning commission gathers the main features of the Plan including the principal magnitudes into a Draft Memorandum. It is submitted to the Central Cabinet where it is discussed in detail, each Ministry being deeply concerned with the adequacy of proposals in its respective field and is then placed before the National Development Council under discussion.

While the Draft Plan is under discussion throughout the country, the Planning Commission in association with the Ministries at the centre holds discussions regarding the plans of individual States. These involve a study of their financial projections, proposals for raising additional resources and their

detailed plans of development in different sectors. After these deliberations the final report on the Five Year Plan is prepared which is submitted for approval of the Cabinet and the National Development Council. With the approval of the Council the report is published and presented to the Parliament usually by the Prime Minister. After discussions lasting for several days, each House of Parliament accords its general approval to the Plan and gives a call to the nation for its implementation and for the achievement of the objectives and targets embodied in it.

Planning in India is essentially a multi-level planning process. The crux of this process is that it incorporates the principle that proper decision making is possible at a particular level only if the strategy at each decision level is determined after a careful consideration of the potentials, needs and limitations of the next higher as well as next lower unit of the plan. In this sense, even though agriculture and allied activities, extension of economic infrastructure, provision of social services and development of village and small industries is the responsibility of the State, it may not rule out the possibility of this responsibility being borne at the district and regional levels. In fact, the concept of multi-level planning envisages that it is neither economical nor feasible to collect and analyse information relevant to all decisions involved in planning at the Central or State levels. (1)

State Level

At the State Levels almost parallel procedures are adopted in plan formulation. In all the States there are either State Planning Boards or State Planning Commissions which have been constituted at the instance of the Central Planning Commission. An approach paper is prepared by the State Planning Commission which is circulated amongst various experts and institutions concerned with planning and development of the State. Then there are panels of economists and working groups constituted almost on lines similar to those adopted by the Central Planning Commission. Several States have established their own planning machineries to look after the technical and economic aspects of plan formulation.

As indicated earlier the State Plans are formulated and finalised in consultation with the Central Planning Commission and the outlays are also finalised for the entire plan and for each sector with the assistance of working groups at the level of Central Planning Commission. The final report is

then submitted to the State legislatures for their general approval as is done at the central level.

District Level

District Planning is a kind of area based sub-State planning and arises from the need to supplement the national and State Planning with a more detailed examination of resources, problems and potentials of local areas (i.e. districts) so that investment programmes more specifically tailored to the particular needs of each district could be evolved and supplemented. In other words, district planning implies evolving a developmental scenario at the district level consistent with the specific needs of the people, the growth potential of the area and budgetary allocations available. The concept of district planning adopted by the working group appointed by the Planning Commission is akin to the concept of integrated area planning. It assumes that the district is a sub-State unit of decision making within the system of multi-level planning. In contrast to the national and State plans the district plan would represent a distinct multi-sectoral package of area specific investment proposals and institutional arrangements suited in the context.

In the context of democratic decentralisation district planning has assumed a great significance and there is a thinking that district as a unit of planning and administration should be given constitutional recognition so that it is treated on the same footing in the State as the individual States are treated by the Centre in a federal system of government.

There are different methodologies and models adopted by the different States for decentralised district planning. However, the common feature of these approaches is that, all the States which have initiated this process have disaggregated the total plan schemes into State sector and district sector schemes. The outlays for such schemes are consolidated into a divisible pool and it is allocated to different districts on the basis of a formula which aims at allocating more funds for relatively backward districts. On the basis of these allocations district planning bodies are required to prepare their own five year and annual plans. This process is still in an infancy stage and various kinds of refinements are being thought of to improve the quality and content of district plans. The nature of planning machinery also differs from State to State. Generally, there is a District Planning and Development Council in these States which does not involve the Panchayati Raj Institutions in the process of district planning. These bodies are of mixed character and they have official and non-official members but are largely dominated by officials. It is only Karnataka

which has recently involved the Panchayati Raj institutions and an effort has been made to constitute a district government in a true sense.

Block Level

In the Draft Plan 1978—83, Block level planning was conceived to complement rural development effort through fuller utilisation of local resources for full employment on the one hand and a quick attention to the local problems on the other. In November 1977, the Planning Commission appointed a working group under the chairmanship of Prof. M. L. Dantwala to draw up guidelines for block level planning. Another Committee on Panchayati Raj institutions headed by Shri Ashok Mehta was appointed in December 1977. Both the Committees submitted their reports to the government around 1978. In implementation, block level planning confining itself to IRD programme, tended to become an isolated exercise without developing adequate 'links' with higher levels of planning. Since district was later accepted as a unit of planning below State level and also because of several constraints to local level planning the block as a unit of planning could not emerge as a significant one. Nevertheless, block will have to be recognised as an important link in the context of planning for balanced development of a district.

Town Level

The First and Second Five Year Plans, by the large, were confined to Housing Schemes and relegated urban development to secondary position. It was during the Third Five Year Plan (1961—66) that the process of preparation of master plans for urban centres and regional plans for selected regions was started under a centrally sponsored scheme. However, in the State of Uttar Pradesh the Town and Country Planning Department was established in early fifties having advisory functions in respect of designing and planning of schemes sponsored by government or local bodies. It had started the work of preparation of master plan for Kanpur and Lucknow. But during the Third Plan the work was taken up on a better scale and in a more comprehensive manner.

As a matter of fact, the preparation of a master plan is the responsibility of the local body or of the authority concerned. These are prepared in pursuance of the respective acts which have been enforced by the States to regulate and control the development of towns and cities. However, all the master plans completed so far have been prepared by the Town & Country Planning Department on behalf of the

Development Authorities and controlling Authorities concerned.

Village Level

Although village is the basic spatial unit where most of the developmental activities converge, it has

hardly secured any place in the planning process. There is no programme which takes care of the physical development of the village. They continue to grow in a haphazard manner and the basic facilities like paved lanes, proper drainage etc. are generally missing.



Integration of Economic & Spatial Planning—State of Art

An appraisal of the planning process described in the preceding chapter would at once indicate that national planning has been dominated by sectoral approach and there has been hardly any thinking about its physical or spatial dimensions. In a country as big as diverse as India, national development should essentially take into account the spatial (regional) dimensions. This is also warranted by socio-political considerations. As a result of sectoral planning being practised so far there has been concentration of economic activities as also the allied infrastructure at a few places. Consequently, a colonial type of economic development has taken place within the nation itself leading to serious disparities in income and quality of life between various regions and urban and rural areas. The problem of regional imbalances and urban-rural disparities is detrimental to achieving the goal of social justice and ensuring political harmony so necessary for an integrated national development.

It may not be out of place to mention here that in our developmental thinking there has been an overwhelming rural bias. Actually, our planning ideology has itself evolved out of our concern for rural development. Urban development has always been separate from rural development and urban-rural dichotomy has always been in the forefront. Thus, there has been very little by way of explicit urban policy at the national level. Which could have facilitated the linking of local level planning, physical in nature, to the national sectoral planning.

National Level Policies

Formulation of the Plan for urban development is done through the Working group on Housing and Urban Development in which the Urban Development Division of the Central Planning Commission and the Ministry of Urban Development are involved. As very little resources are earmarked for the sector there is nothing much that could be done by the

Working Group. Not only the financial resources have been the constraint, the lack of awareness about the need and importance of urban development has also been a greater obstacle in getting its due. As such the First and Second Five Year Plans talked of housing and did not mention anything explicitly about urban development. Till then urban development was only a non-plan subject. The First Five Year Plan, therefore, emphasised the need to link up various solutions to the housing problem with sound town and country planning. The Second Five Year Plan mentioned that housing should be considered not merely as a problem by itself or as an attempt continually to catch up with the needs but as a part of the wider problem of planning of urban areas and of their economic and other relationship with the regions in which they are situated.

It was for the first time that the Third Five Year Plan provided specifically for the preparation of urban development plans for major cities in the country and regional development plans for rapidly developing resource regions. The programme formulated by the Central Government during Third Plan envisaged a twofold approach. The first was to bring under proper direction all urban growth in the country both in the large cities as well as in small towns where growth was likely to take place in a substantial measure. Such direction was to include the establishment of alternative growth centres around big metropolitan cities and in resource regions where the rapidly increasing population could be housed and provided adequate employment. Further all urban growth was to be directed within the framework of regional development plans, priority being given to resource development regions wherein growth points referred to above could be suitably located and developed with an assured measure of success. The second was to provide adequate resources in terms of finance and personnel for promoting and directing planned urban and regional development.

In pursuance of the above policy directives, the work of preparation of master plans was taken up as also the preparation of regional plans. A regional plan for the south-east resource region was started at the central level by Town & Country Planning Organisation. Similarly, Town and Country Planning Departments were established/strengthened and they also started preparation of regional plans for selected regions. However, the resources for their implementation were not forthcoming and also these plan could not be integrated with the State Plans.

In the subsequent Five Year Plans also nothing substantial could be done and the approaches that have been followed can at best be described as piecemeal and desultory. Even schemes which were called as integrated, e.g., integrated urban development programme (IUDP) and integrated development of small and medium towns were focussed on towns of different sizes: cities over 3 lakhs population in the case of IUDP and towns under 1 lakh population under IDSMT. The selection of towns was then quite erratic and little attempt has been made at planning of urban development as a whole. Another major continuing scheme was the preparation of master plans for a large number of cities but these were largely infructuous because of the lack of connection in the preparation of these physical plans with investment planning at the city, State and national levels. They have essentially followed British Town Planning traditions as were applied to British New Towns. Also no institutional machinery was devised to link such plans with national and State plans. The other major interventions have been the metropolitan city and State capital projects and the various slum clearance and improvement schemes. In these cases investments were made in response to major service deficits which could no longer be ignored or, in the case of the new State capitals, investments were made relatively lavishly in the provision of a very high level of infrastructure. Other lavish investments have been made in the establishment of new townships for large public sector enterprises such as steel plants and heavy electrical plants.

National economic policies have their own spatial effects which should be visualised in advance. The Task Force on Housing and Urban Development has very clearly brought out this aspect in its report on Planning for Urban Development. According to the Task Force, the spatial policies in India, such as restrictions on industrial location, incentives for industry to locate in backward areas, infrastructure investment in particular types of towns and cities etc. have seldom been strong enough to alter existing spatial and hierarchical patterns.

National Economic Policies

Policy and programme interventions have been half-hearted, loosely co-ordinated, to say the least, and even counter-productive. Spatial considerations have never received the attention they deserve. Policy has been half-hearted in as much as few of the points at which governments might intervene to manage urbanisation and affect its course and direction have been properly tackled. It is unco-ordinated in as much as national planning tends to be in terms of sectoral outlays while urban planning has been mainly linked with physical layouts. It is counter-productive in as much as the effort has been to divert, retard or stop urban growth, and in particular to inhibit the expansion of metropolitan cities.

The Task Force has illustrated some of the unintended spatial effects of national economic policies. It adds that industrial policy, for example, has had many unintended effects. One key element of the country's industrial policy has been its textile policy. A combination of licensing control, excise duty policy and trade policy, favouring handlooms over powerlooms, over mills had led to a restriction of the mill sector expansion in textile production. The main objective of this policy has been to protect the employment potential of decentralised handloom industry. The effect has been to keep a large number of cities relatively stagnant in their spatial and technological industrial structure. As a result, some of the mill based cities have grown slower than they otherwise would have if production of mill cloth had been encouraged. Simultaneously, some new centres with concentration of powerlooms have sprung up. Some of these effects may be regarded as beneficial spatial effects of industrial and employment policy but were hardly foreseen.

Similarly, trade Policy has also had many unintended effects some of which have been beneficial. To the extent that some industries are more protected than others, the former tend to concentrate in a few locations. On the one hand an export oriented growth strategy promotes the location of industry (and hence population) in port cities like Bombay or those well-connected by transport to those port cities. On the other hand, strong import substitution policies have favoured industrial growth since the mid-fifties in inland cities such as Bangalore, Hyderabad, Delhi, Bhopal, Ludhiana and Jullundhur. Again trade protectionist policies have contributed to the languishing of the port cities of Calcutta and Madras. At the same time an industrial licensing system have favoured the proximity of industry, for at least of large corps of liaison personnel, to administrative centres of political and financial power

where the licensing permits, etc. have to be obtained. This had led to somewhat faster growth of these governmental centres. Many of the State capitals have grown significantly faster in population than other cities. Particularly rapid has been the growth of Delhi, the national capital not all of it originally intended. Protection of industry involves an implicit subsidy: it brings about an effective transfer of resources into industry from other sectors which in turn results in a bias towards spatial concentration even of basic social services such as education, health and medical services. Under-investment in these services in dispersed areas increases to some extent the attraction of those areas where these services are concentrated.

Transport policies have had very strong spatial effects. Since the existing railway network has been altered little since independence it continues to reflect the colonial priorities of efficient transportation to the port cities. Industrial dispersal policies can only meet with limited success if transportation systems are lacking in the areas which are designed as recipients of the dispersed industries. A major effort, for example, has been made to develop the twin city of New Bombay on the mainland adjacent to Bombay island. But development has been slow in the absence of a rail link either to the new city and between it and its hinterland.

An example of explicit spatial policy is the decentralisation of industry which has been a declared aim of the government for a long time. Entrepreneurs are given attractive incentives to locate in backward areas. These incentives include low interest rates on loan from term lending institutions, priority in the granting of loans, income tax concessions, capital investment subsidies and transport subsidies. In addition, different State Governments offer additional incentives to firms to encourage location in the backward areas of their States. Another measure for the decentralisation of industry has been the provision of industrial estates in outlying areas. The issue is more complex than is generally supposed. It can be asserted with some confidence now that considerable dispersal of industry has taken place in the last fifteen to twenty years, which has at least partly been a direct result of these policy measures. But the pattern of dispersal may not have been as planned or up to expectations.⁽²⁾

It is, therefore, obvious that in the name of tackling the physical problems of urbanisation the government action has been in the shape of separate programmes of public housing, slum clearance and urban renewal and rural reconstruction. But such programmes have

not been conceived in a coordinated manner and in a proper perspective. They have, therefore, helped little to solve the problems of urbanisation and are often found to be wasteful. What Mrs. Catherine Bauer (Economic Development and Urban Living Conditions) pointed out in early Sixties still holds good that 'A scattering of expensive housing projects, a few blocks of slum clearance some additional miles of pipe or pavement, even a careful city wide plan or a successful new town built from scratch count for very little when viewed against the swelling tide of urban migration. If there is any solution, it will require much broader policies based on a more fundamental understanding of the whole process of economic development, cultural adjustment and urbanisation.'

It cannot be overemphasized that unless further urbanisation is guided by broad policies for a concerted attack on the closely related problems of population growth, urbanisation, industrial development and development of rural areas, the present conditions of overcrowding discomfort, maladjustment, growing disparities and differentials in quality of life will be perpetuated on a higher scale.

Another problem with regard to building up the concept of spatial equilibrium into our development plans is that at the national and State levels, functions that have a direct bearing on urban and regional development, such as town and regional planning, housing, water supply and sanitary engineering are often dealt with by different ministries or government agencies. This makes it difficult to ensure the necessary coordination of programmes in those fields, particularly with respect to their adequacy and timing. Thus, new urban areas have been developed without a coordinated plan for supply of the necessary drinking water, sewerage, provision of health and educational facilities. This is also true of big industrial projects.

Also, there is lack of coordination at the regional level in the implementation of regional plans. The general practice is to leave the implementation of the projects to individual local authorities while many of the public works are carried out by the central or State Governments. Consequently, there are many gaps and inconsistencies in the programme at the point of impact in the region or the local community as well as serious time discrepancies. There are some times direct conflicts between the overall plan and the individual programmes which defeat the result intended.

It is well known that the overhead capital for infrastructural facilities like power, roads, railways, ports, canals, factories, school, housing water supply

sewerage drainage etc. almost account for around 70 per cent of the total capital outlay in the national development plans. There is the vital question to be resolved is that how best these investible resources could be steered in space and time and selected growth points to obtain a desired pattern and form of cities and regions and a planned environment. Lack of visualisation of the possible change in the quality of physical and social environment has resulted in uneconomic utilisation of capital resources, distorted settlement pattern and unhealthy environment.

It may also be mentioned here that the above maladies have occurred because there has been hardly any appreciation of the fact that all economic activities in combination produce a unified system of spatial economy, land use structure and circulation pattern. Consequently, the national development plans have tended to overlook some of the most critical issues such as identifying growth poles, distribution of economic activities and employment in a balanced manner among metropolitan cities, medium sized towns and small urban places, building new towns versus expanding cities and so forth. The neglect of urban development and not paying due attention to the pattern of urbanisation taking place has again resulted in sufferings to rural areas. What happens in this process that small towns emerge as nodal points and economic activities start coming to such towns which have a population of around 10,000 in the beginning. No attention is paid to controlling and directing the growth of such towns let alone allocation of resources in the initial stage. We are awakened when the problems of unplanned development become insurmountable. Again a process of an unbalanced regional development starts taking place.

Existing Arrangements for Spatial Planning at the National Level

There is no organisation at the National level which specifically looks after the spatial aspects of national development planning in a comprehensive terms. However, the organisations concerned with urban planning in some form are the Central Planning Commission, the Ministry of Urban Development and the Town and Country Planning Organisation. In the Central Planning Commission, the Housing & Urban Development Division is responsible for policy formulation and coordination. There are other ministries and organisations of the government of India which have an important role to play in the matter of urban planning and development. Major investment decisions are taken by national level organisations which have various spatial implications. Each of these organisations have their own systems and methods of appraising projects and their own criteria for taking

investment decisions. Furthermore, they themselves take action resulting from their own decisions and often have their own machinery for dealing with physical and infrastructural aspects of their major projects and programmes which preclude consultation with appropriate bodies.

The Planning Commission, as in other sectors, decides on the total quantum of resources that are to be devoted to urban development for the country as a whole. It further allocates these resources between States and between schemes both for Central Sector and State Sector activities. Urban development investments are mainly in the State Sector except for some specific Central Sector Schemes. It is not, however, clear on what basis the allocation of resources to urban development is done. On existing schemes, the allocation is largely based on previous allocations. On World Bank assisted metropolitan and other projects, the allocations get determined by the size of the negotiated projects. New schemes, e.g. the IDSMT, which appear in a Five Year Plan, are allocated some 'ad hoc amount'. In addition to the expenditures included in the head 'Urban development' as mentioned earlier, many more expenditures under other heads are made in industrial townships, by the railways and other organisation which go towards augmenting the total volume of urban infrastructure. At present, there is little co-ordination of these allocations within the Commission.

The existing 'Housing and Urban Development Division' is one of the smallest in the Commission consisting of just 3 officers : one Deputy Adviser, one Senior Research Officer and one Research Officer. As such, little technical work and forward planning gets accomplished, the pressure of routine work being what it is. There is little capacity for ongoing analysis of urbanisation patterns, settlement patterns, evaluation of existing projects, etc.

The Perspective Planning Division (PPD) is responsible for intersectoral consistency and coordination as well as for long term projections for the country as a whole, disaggregated sectorally. As yet there is no urban/rural dichotomy built into the perspective planning model though more consideration is now being given to regional disaggregation. The other division that has considerable responsibility for urban related issues is the Transport Division which is responsible for urban transport policy as well. There is yet another division that should have been involved in spatial planning for urban development is the Multi-Level Planning Division. But there is no coordination between these divisions which are directly or indirectly concerned with urban development.

The Ministry of Works and Housing has one Division concerned with housing and urban development headed by a Joint Secretary and it performs essentially secretariat functions. As it currently stands it has little technical capacity and is mainly administrative and policy making in nature. In terms of planning the Ministry is responsible for coordinating the proposals and schemes for urban development for consideration of the Planning Commission. Further, it is responsible for monitoring of the plan schemes once they are approved. It is not technically well-equipped to do so currently.

The Town and Country Planning Organisation is the technical wing of the Ministry but currently plays a very limited role in influencing urban planning and development in the country as a whole. It was founded originally for the formulation of Delhi's Master Plan. After the formation of the DDA, it was transformed into a national organisation. In the sixties it was quite active in the promotion of State level town planning organisations as well as in the formulation of the master plans. Its decline in activity and importance has partly been a result of its success in forming its State level organisations and the TCPO, it would appear, has not been successful in adopting to its changed circumstances. Now it has direct responsibility only in respect of certain programmes financed by the Ministry. It also offers services to various public sector undertakings and other Government Departments on a consultancy basis. The Ministry also places some monitoring responsibilities with the TCPO for specific plan schemes. The scrutiny of projects under the IDSMT, for example, is done by the TCPO, as well as monitoring of progress of slum improvement schemes. Although, the organisation has a multi-disciplinary staff its orientation has largely been that of physical planning. If the Ministry of Works and Housing has to plan a greater role in urban planning and development at the national level, the TCPO could be developed as a strong technical arm of the Ministry for the appraisal of major projects and advice on measures to be taken to deal with the consequences of major Central Government investments in the country.

It would be obvious from the above analysis that there is no proper coordination between Ministries/Departments/Organisations at the national level in the matter of major investment decision and location of projects. Even looking at the most obvious implications, each project has to consider impact on employment (direct and indirect), basic services for large number of workers and non-workers, social amenities for the new settlements which are likely to come up, communication network and housing

Impact on existing settlements, both urban and rural and the relationship between the new settlements and the existing ones would have to be considered also.⁽³⁾

State Level Planning with Special reference to Uttar Pradesh

It needs no elaboration that the State Governments prepare their plans within the broad policy framework given by the Central Planning Commission. The planning procedure followed at the State levels are almost the same. In Uttar Pradesh a State Planning Board was constituted in 1950 to provide an adequate planning machinery at the State level. It was expected to function as a chief consultative body for advising government on broader questions of policy. It was to indicate the content, the form, the phasing and the long-term objectives of State plans. This body could not make any significant contribution perhaps due to its structural weaknesses. In 1962, at the instance of the Central Planning Commission, the State Planning Board was reconstituted but subsequently it was abolished in 1965. Again on the recommendations of the Administrative Reforms Commission, State Planning Commission was constituted in 1972 with Chief Minister as its Chairman and Planning Minister, Ministers for Irrigation, Agriculture and Hill Development are also its members with Planning Secretary as its Secretary. Besides the secretaries of important departments of State Government it also has non-official members and some experts in different disciplines of planning.

The State Plan is prepared by constituting different working groups. There is a working group on Housing and Urban Development whose chairman is the Secretary, Urban Development and the Chief Town and Country Planner is its Secretary. The Working Group gives its recommendations to the State Planning Commission through the Planning Department on the basis of which the sectoral plan is prepared for urban development which forms a part of the State Plan.

It may be mentioned that although elaborate arrangements have been made for preparation of sectoral plans but the objective of inter-sectoral integration is hardly achieved. There are several reasons for this. Firstly, the interaction at the level of State Planning Commission is not organised regularly. Secondly, the exercise of intersectoral integration is not done seriously with the result that the impact of proposed programmes in one sector on the others is not visualised properly. Lastly, it has been observed in practice that the State departments are guided more by their counterparts at the Centre and they do not make serious attempt to deliberate with

other allied sectors. Thus, there may be sort of vertical integration but the horizontal integration at the State level is hardly achieved.

As a matter of fact, this points out to a deeper malady. The tendency of the State departments to attach more significance to their counterparts at the Centre is due to the fact that the Central Ministries or Working Groups wield more influence in allocating outlays for a particular sector rather than the State Planning Department. Therefore, the so-called autonomy given to the States in preparation of an integrated State Plan becomes rather meaningless since the Centre has reserved a large part of outlay in the name of centrally sponsored schemes.

So far as spatial planning in comprehensive sense is concerned there is again no organisation at the State level which thinks in these terms. In the State of Uttar Pradesh, there is a State Planning Institute which has an Area Planning Division (alongwith Perspective Planning Project Formulation & Appraisal, Monitoring, Manpower Planning, Evaluation, Training, Economic & Statistics, Planning Research & Action and Hill Divisions). The Area Planning Division is engaged in taking up studies to suggest policies to reduce inter-regional disparities within the State and also prepares some programmes for broad economic regions in which it has been divided. But there is no co-ordination, whatsoever, between the Town and Country Planning Department and the Area Planning Division of the State Planning Institute.

Regional Levels in Uttar Pradesh

In the beginning of the Third Five Year Plan, under a centrally sponsored scheme called 'Regional Planning Scheme' the Town and Country Planning Department started working on the formulation of regional plans for four regions, i.e., (i) Rehand Region, (ii) Gorakhpur-Deoria Region (iii) Hardwar-Rishikesh-Dehra Dun Region (iv) Meerut-Bulandshah Region. Amongst these the first was a resource region, the second was a backward region, the third was a rapidly, growing urban region and the fourth was a part of the National Capital Region.

How and why these regions were selected for regional planning is a moot question. It is but sure that the Planning Department was not consulted before initiating such an action. It is obvious from the fact that the State Government, faced with the problem of mounting inter-regional disparities divided the State into five economic regions towards the end of Third Five Year Plan. These are Western, Central, Eastern, Bundelkhand, hill regions. Of these the last three have been recognised as relatively backward regions. Thus, the two departments have been working in isolation.

Before embarking upon the work of either identification of planning regions within the State or taking up the preparation of regional plans, it was logical as also warranted by the considerations of the larger interests of the State that the Department of Local Self-Government which had the administrative control of the Town and Country Planning Department should have consulted the Planning Department which is responsible for formulation of the State Plan and allocation of outlays to various departments. The work of preparation of regional plans started during the Third Plan was continued during the Fourth and Five Year Plans as well, in spite of the fact that these plans were neither implementable nor were pressed for approval of the Planning Department. Even the regions identified by the Town and Country Planning Department did not coincide with the economic regions, demarcated by the Planning Department or the administrative divisions. Furthermore, the completion of the exercise of preparation of regional plans took around six years and what finally came in the shape of regional plan was collection of statistics, present and future land use and of course the proposed settlement pattern but not the concrete programmes which could have been dovetailed with the State Plan and could have helped the State Government in developing methodologies for accelerated development of backward regions in the State.

This shows how different departments are working in water-tight compartments and there is no mechanism for coordination between the different departments let alone the sectoral integration. It also shows the lack of awareness about regional planning or for that matter, the need for integration of economic and spatial factors in the planning process which is the dire need of the State.

There has been a little change in the scenario even after two more plan periods have elapsed. The Planning Department has been responsible for decentralised planning and from the year 1982-83 a scheme of decentralised district planning has been initiated. This district plan, of necessity, has to be spatially integrated plan. There is the problem of expertise as there is no functionary at the district level who can prepare an integrated area plan. It is needless to mention here that a regional planner/geographer has essentially to be a member of the district planning team as recommended by the Planning Commission which is ready to provide central assistance also under the scheme of strengthening the district planning machinery. The State Government has not been able to avail of this offer due to constraint of resources because it will have to bear the entire burden after

central assistance ceases to flow. Therefore, an appropriate person trained in the techniques of regional planning could not be appointed so far.

On the other hand, the Town and Country Planning Department has established its offices in every division. These divisional units are engaged in preparation of plans for the towns selected under the IDSMT scheme. The assistance of these units could have very well been taken for preparation of integrated area development plans at least in some districts to begin with and there could have been an experiment in the integration of economic and spatial factors at the district level. But the initiative has yet to come from either side. These are examples of utter lack of awareness of the need and importance of spatial planning as well as its integration with sectoral (economic) planning.

It is no gainsaying that the adoption and sustenance of any developmental scheme depends on the political and administrative will. If a scheme, howsoever, important it may be, does not have that kind of support, cannot be implemented or cannot receive due priority or importance. It is exactly what has happened in this case. The scheme of regional planning although conceptually sound, has received scanty support from the State planning authorities.

The Town & Country Department, at least in Uttar Pradesh has been labelled as a department responsible for and capable merely of handling urban problems or having expertise in the field of urban planning. The better side of the picture has been lost sight of and the regional planning aspect has been neglected. The government departments rarely think in terms of regional implications for regional dimensions of the economic development incorporated in sectoral programmes.

As already mentioned whatever coordination or plan formulation activity takes place is in the shape of the working group on housing and urban development. Although representative of Planning Department is included, in the group but there is no visible impact of the groups recommendations on the Plan or vice-versa. These are probably not looked into at any stage either at the Central level or at the State level. As a matter of fact the exercise of constituting the working groups at the time of formulation of the Five Year Plans has taken the shape of a ritual. Exactly as some rituals are performed the working groups meet rather in a routine manner. The Working Group on Housing and Urban Development is no exception to it. It is almost an internal matter of the Department of Urban Development as the Chief Town

and Country Planner is its convener while the secretary to Government in the Urban Development Department is its chairman. Year after year the same recommendations are made which tend to lose their meaning repeating the same rhetoric time and again. An interesting example of this is the particular recommendation to prepare a State Physical Plan at the State level and the requisite mechanism to prepare it. It was also suggested that there should be active co-ordination between Planning and Town & Country Planning Departments. Despite the fact that it was a very crucial recommendation which could have gone a long way in restructuring the entire planning process in the State to make it more effective, but probably, it went unnoticed altogether. Interestingly, the same very recommendation is contained in the reports of the Working Groups appointed by the State Government for the Sixth and Seventh Five Year Plans and it goes still unnoticed.

In this context, sometimes some may feel that had the Town & Country Planning Department been under the administrative control of Planning Department perhaps the things would have been better. Even if this proposal may appear to be far fetched, the need for an active coordination, collaboration and co-operation between the two departments can be hardly overemphasised.

The Task Force on Planning for Urban Development has surveyed the State level organisations all over the country dealing with urban development and planning. There is no uniform pattern of the responsibilities of the Secretariat Departments. In West Bengal, for example, there is a Department of Metropolitan Development in addition to the Departments of Urban Development. Other States often have Departments of local self Government which are exclusively concerned with the administration and control of local bodies. In some states there is one Department of Housing and urban Development while in other these responsibilities are split into two departments. In addition, core infrastructure services like water supply are often the responsibility of yet another Department or organisation making coordination difficult. In the same context, the Task Force on Urban Development has rightly pointed out that most of the Town Planning Departments are still engaged in conventional physical land use planning, though no doubt there are some exceptions to this general observation. As mentioned earlier Town Planning Departments have formulated Master Plans for a large number of towns under an earlier Plan Scheme. But all the shortcomings and impediments that attack

at the national level appear in accentuated form at most state levels. There is not firm tie-up between the plans of the Town Planning Departments and State funding of programmes. While preparing these 'Plans' the Town Planning Departments rarely consider the problem of resources. This is not necessarily the fault of these departments since they were set up as primarily physical planning agencies and staffed mainly with physical town planners.

The State Secretariate Departments concerned with Urban Development (as with other secretariat departments) have little planning capability. By and large, they merely do some expenditure allocation of the few plan schemes in this field. (IUDP, IDSMT, slum improvement) to the various agencies (Local and State level) who implement them. In State with metropolitan cities, the importance of the departments is somewhat greater and so is the power of the Metropolitan Development Authorities where the detailed planning work concerning the metropolitan areas is done.

The State Planning Bodies have also yet to focus on urban development planning and their current activities mainly consist of expenditure allocation accounting and coordination. Even the States which have better planning bodies have little technical planning capabilities in urban development at the State level.

The picture at the local level is somewhat mixed. To begin with the largest cities : Calcutta, Madras, Delhi, and Bombay all have metropolitan development authorities now (CMDA, MMDA, DDA and BMRDA). The responsibility for planning for the metropolitan area rests with them. In the case of CMDA and DDA they carry out the bulk of execution of capital works as well. MMDA and BMRDA, though quite different in their functions, are similar in that they are not executing agencies but do mainly

planning and co-ordination. MMDA has been more effective (and older) while BMRDA is yet to establish its authority effectively because of the presence of the well functioning and powerful Bombay Municipal Corporation which, moreover, unlike other city corporations, has jurisdiction over all of Greater Bombay. Of the other 8 existing metropolitan areas, development authorities have been appointed in all except Nagpur and Poona. One of the key problems in the planning of metropolitan areas is the multiplicity of jurisdictions. Characteristically, the jurisdiction of the existing city corporations has not expanded with the growing city with the result that the metropolitan areas is composed of a number of local bodies ranging from city corporations to municipalities to notified area authorities.

Even below the metropolitan level there are about 50 urban development authorities who have been designated as the relevant planning authorities for those cities. Their level of activity and quality of expertise is quite varied. The reason for their appointment is usually two fold. One is that they become necessary when an urban area expands to cover more than one local body. The second is that State Governments prefer to channel funds for infrastructure investment through a State Government Agency like an urban development authority rather than through the existing local bodies which are often seen as too corrupt and inefficient.

In the rest of the towns and cities there is precious little planning except for the Master Plans prepared by the Town Planning Department, on behalf of the local bodies. The lack of capital funds renders planning for infrastructure investments infructuous anyway. What then remains is the enunciation of planning and development controls to be implemented by the local body, which do not amount to much beyond words and exhortations (').

Significance of Spatial Planning

Generally speaking, there has been no serious attempt to bring spatial planning into the main-stream of national development planning. Presently, there is no mechanism in the planning process to work out the spatial (regional as well as urban/rural) implications of the sectoral pattern of investment that is envisaged in each Five Year Plan. It may be mentioned that before industrialisation the interlinkages between different parts of the economy were weak enough to be ignored in formal economic modelling. But as the economy develops denser inter-sectoral as well as spatial linkages, it will be necessary rather indispensable to do it more systematically.

Fortunately, the realisation of the above problems and eagerness/willingness of the government to tackle above problems can now be seen in the constitution of the National Commission on Urbanisation with the objective of suggesting how a national programme could be evolved, on the one hand, to create a climate in which there should be a healthy growth of urban settlements performing vital functions including provision of gainful employment and, on the other, to develop an action programme which could deal with the problems cities generate.

In its interim report the commission has pinpointed that urbanisation has a positive role to play in restructuring the Indian economy over the next few decades. Further, the Commission has come to the conclusion that rural prosperity generates as much migration to urban areas as the rural poverty. The commission has also noted that rural stagnation leads to fast growth of small towns which because of proximity to the villages from which migration occurs attract rural migrants. The Commission is of the view that programmes for rural development which enhance rural prosperity must inevitably lead to even greater urbanisation as the demand for services and access to social infrastructure grows. The unit at which quality education and medical facilities, for example, can be made available would have to be larger than that a

small rural settlement can provide. Similarly, the trading and manufacturing activity which are either agriculture based or which serve the rural community in terms of capital consumer goods can also operate only at a scale large than a small village. Not only is prosperity actually leading to the growth of urban centres but in fact there should be even faster growth the full benefits of economic development are to be reaped by the agriculturists.

The rate of growth of rural population has been during 1971—81 around 19 per cent. The National average is approximately 24 per cent which means that it would be safe to assume a future shift through migration. Even at the relatively slower growth rate of population rural India has an accretion of over 9 million people per annum. Over a 20 years time span even if only a third of this additionality come into the labour market 16 million more jobs would have to be found for these people. At the rate at which the rural economy is growing there is no possibility of this many additional jobs in the rural settlements only. Potentially, these are the migrants to urban settlements where non-agricultural occupations may be available. In fact, viewed from the urban angle at the present rate of growth the urban population would be 340 million, i.e., an addition of 180 million people in 20 years. If half of this represents rural-urban migration, then it is 90 million potential rural migrants who will have to be accommodated in urban settlements. The inevitability of further urbanisation, therefore, is evident.

It would therefore, be obvious that we should think of a judicious deployment of investment in jobs and infrastructure in smaller growth centres thus effectively curbing the migration pattern for a balanced urbanisation.

We must therefore, comprehend the positive aspects of cities and the opportunities, they present since urbanisation is a necessary concomitant of the development path we have chosen.

While the pace of urbanisation will increase and must be encouraged the Government of India and the State Government have an unique opportunity for guiding the present urban pattern towards a system in which our towns and cities continue to maintain strong hierarchical polycentric linkages with defined hinterlands and micro regions. The present Pattern shows that the areas where agricultural activity predominates tend to have a large no. of small sized settlements well distributed geographically. Areas where there is concentrated industrial activity tend to have a few large sized settlements. Within those regions where industry is location and resource specific, the settlements tend to be isolated in the midst of a relatively undeveloped hinterland. Herein lies the seed of a future development strategy which would permit growth in equilibrium all over the country. In this context the National Commission on urbanisation, has suggested that there is no particular compulsion in India to concentrate urban activity only in a few large centres such as Bombay, Calcutta, Madras, Delhi, Ahmedabad, Hyderabad, Kanpur or Bangalore. The logic for harnessing the potential of all or some of the 555 fast growing towns is self evident and any effort in this behalf should reap high dividends. We should therefore, think in terms of a rational policy of urbanisation which would take into consideration the development of not only these future growing towns but also those settlements which in a long-term perspective would become small towns and serve the population of its hinterland in terms of provision of infrastructural facilities and community services. It must be mentioned here that, similarly as urbanisation is concomitant of development, urban development should be seen not as an independent programme by itself but as the cumulative effect of several programmes of economic development which have an impact on urban areas and which cause growth and changes in urban structures. The task of organising and directing this urban growth and its metamorphosis to achieve maximum benefits from inter-sectoral coordination is necessary and most important.

It is also a fact that urban development conceived in a narrow sense of physical planning dealing mainly with internal arrangement of an urban area cannot deal effectively with many of the problems of urbanisation which are, more often than not, generated outside the city limits. Thus, it must be conceded that planning for even a single city has to be done in a larger spatial framework.

Since the towns and cities perform important economic functions, planning of urban development should essentially be supportive of the economic development in the country, state or sub-region, be

it in agriculture, extractive industry, manufacturing industry or in the tertiary sector. The provision of urban services such as transport, communication, water sanitation and shelter alone is usually unlikely to stimulate large-scale urban development. It is important to time investments in urban services and shelter to coincide with investments in agriculture and industry, mining and commerce which provide sources of permanent employment. Therefore, a proper urban development approach must consist of two constituents. The first is the interaction between physical and investment planning and the second is the preparation of regional and sub-regional urban development plans to make the first possible. Industrial location policy must be made to sub-serve regional and urban planning. It has, therefore, been envisaged that during the Seventh Plan a concerted effort should be made to channelise private industrial investment in the vicinity of small and medium towns so that migration of population is diverted to these from going to the metropolises. The same principle should be applied to public sector investment.

Regional urban systems can be identified according to their economic, climatic, geographical and transportation characteristics, planning, for urban development can be done on the basis of such regions and according to the relative need and function of each towns in its regional context. Thus, within each planning zone allocation to towns should be made more on the basis of their functions with particular emphasis on their respective industrial employment potential than on their sizes.

It is, therefore, obvious the urban development should be conceived in a broader regional or spatial framework. In other words, for effective planning for urban development the system should be built right from below to the top. Similarly, there would be policies and resources that would percolate from the national, State or regional levels to the cities or towns for which development plans are being prepared. Thus the planning for urban development is combination of 'top-down' and 'bottom up' planning.

The above process achieves the integration of physical (spatial) factors with the economic and social factors of development and it has to be, of necessity, pursued at all levels of planning, i.e., national, State Region, District and local levels to ensure coordination of plans and actions. Thus, spatial planning not only forms a link between local plan and the national plan, but it also meets the requirements of intermediate areas which may otherwise be neglected. It can check the powerful trend

towards overgrown and overcrowded towns and provide for a more balanced economic and social life within the region and country as a whole.

It should, therefore, be evident that physical (spatial) planning is a necessary pre-condition for optimum utilisation of resources and deriving maximum benefits from economic planning. Physical planning is primarily concerned with coordination by reconciling conflicting claims for available land. The physical development plan seeks to provide the physical framework within which many types of planned activity economic development, education, social services, housing, transport, etc. can be achieved without wasteful competition, misuse of land or the creation of undesirable environmental conditions.

This involves, first of all, planning the physical location and form of many different kinds of development factories, houses, schools, hospitals, roads etc. It involves the allocation of broad classes of use for the establishment of a system of permanent control over, the use of land in general to preserve the features of the plan itself. These two forms of planning are essentially complementary and not mutually exclusive. The economic and social objectives of the plan can be achieved only within the coordinating framework provided by physical development plan. This kind of integration between physical (spatial) planning and economic planning has been achieved in many countries including USSR, France, Netherland, Srilanka etc. The common feature that emerges from the experience of these countries is that such coordination has been achieved in three stages :

- (i) The first stage consists of assessing the potentialities of development in different fields and working out specific measures and programmes aimed at exploiting them.
- (ii) The second is the preparation of coordination-potentialities of development in different development in each sphere to the availability of finance. The aim here is to establish, on the basis of economic plan, that emerges, the outline of a comprehensive physical plan for the whole country consisting of the approved development projects. This outline physical plan would serve as a framework within which more detailed physical plans for region and local areas would be developed. It would also serve the purpose of taking appropriate action in advance to reserve land for development projects.
- (iii) The third stage provides for implementing the comprehensive physical plan and for

reviewing it from time to time in the light of changing conditions. The most important advantage coming out of the above process is that, at the national level, it becomes possible to have a correct picture of the natural resources in the country, may be the land, water, minerals, vegetation or others. Naturally, the correct estimation of resources will make the plan more realistic.

Therefore, development of a physical frame of reference would assist in relating and correlating the different activities emerging from development programmes to one another recognising their inter-relationships and interactions. These linkages are established both in terms of space and time; time programming being as important as space programming its maximisation of benefits has to be achieved. Physical frame of reference of development enables preparation of schemes much more readily as well as all the factors affecting the programme become immediately visible, the selection of the appropriate alternatives amongst several is rendered easier and physical planning aids in the choice of that alternative which is most conducive to yielding benefits.

A physical frame of reference should, therefore, be prepared before national development plans are given a final shape. It may be pointed out that, although, a sectoral perspective may have been worked out this is not adequate for comprehensive economic planning. It is not adequate even for development of any single sector. Physical planning, which takes into consideration a long term perspective should, therefore, invariably precede sectoral planning and development.

Another important benefit that will result from having physical plans ready as soon as possible is from the regulatory aspect. Once these plans are there all developments have to be guided in accordance with the plan. This will arrest further deterioration and damage to the environment and set the pace for gradual improvement.

It may, however, be added that there are defined dimensions in some sectors which are identified in the project of the particular sector. For example, in the transport sector, the highways to be taken up for construction are clearly identified and the project estimates are prepared on that basis. Similarly, the power sector provides for not only generation along with area location, building channels, etc. but also laying of distribution lines and supply of power to different area, purposes and communities. But the physical developments envisaged by different sectors are not woven together to form an integrated framework for physical development.

In spite of the fact that care is also taken of providing for inter-sectoral linkages at the national level, the absence of a physical framework for development makes inter-sectoral integration difficult when the plan programmes are put to implementation. Such a physical framework if prepared in advance would function as a master plan for development linking the various developments both temporally and spatially.

In the present system such a physical framework for development is available only at the city level and that too in a very limited way. Although, there is much talk about integrated rural development there is little integration of physical activities and physical development take place helter skelter with a very little, if any, relation to one another this is because at no stage

is physical development conceived in its entirety and in concrete physical dimensions in terms of structure plan, master plans or development plans area-wise.

As a matter of fact, if we make an attempt to classify direct investment in urban areas and common to both rural and urban as a result of sectoral programme included in various five years plans, we will find that substantial part of the total plan investment is made in urban areas. Moreover, quite a sizable part of the investment which is common to both the urban and rural areas will also either be spent in urban areas or will produce direct effects. One such exercise was done by Shri C.S. Chandrasekhara (3) for the Third and Fourth Five Year plans which is shown in the following table :

TABLE

Sector	Third Plan Outlay		Fourth Plan Outlay	
	Urban	Common	Urban	Common to urban and rural
1.	2	3	4	5
Agriculture Community Development and Cooperation	—	—	—	—
Irrigation	—	—	—	—
Power	350	662	500	1030
Small Industry	75	24	120	40
Organised Industry and Mining	170	1475	300	3236
Transport & Communication	200	1746	220	2590
Education	110	256	235	475
Scientific Research	—	75	—	140
Health, Family Planning	—	—	150	142
Water Supply	147	70	35	10
Housing & Construction	104	—	250	—
Welfare of Backward Classes	5	—	10	—
Social Welfare	3	—	10	—
Craftsman Training and Labour Welfare	—	72	—	145
Public Cooperation	1	1	3	2
Rural Works	—	—	—	—
Hill Areas and Special Areas	—	—	—	—
Rehabilitation	16	7	30	10
Other Programmes	—	111	211	70
Total :	1181	4499	2074	7890

It has been estimated on the basis of above exercise that direct investment in urban areas included in the draft fourth five year plan was 2074 crores. Also it was estimated that out of the investment of Rs. 7800 crores classified as common to urban and rural areas around 7000 crores was expected to be spent in urban areas. It was also estimated that the investment on the construction components of various

development programmes will be of the order of about Rs. 8000 crores and of this a fairly substantial portion will be spent in urban areas. These estimates were made only for public sector. If the investments in the private sector are also taken into account which will take place mostly in urban areas, it will once again add a further substantial amount to the total investment in the urban areas.

The result of the total investment in the urban areas in different sectors of development will create a large increase of employment, increased tempo of economic activities and consequently urban expansion of a significant magnitude while it is difficult to estimate with any degree of accuracy of the extent of this expansion some broad ideas can be arrived at by relating investment to the expansion that has taken place in some of the bigger urban areas, like Delhi, Bombay, Calcutta, Bangalore, Hyderabad, Kanpur etc.

The above facts call for a proper policy of urban expansion and urban development and above all the preparation of a physical development plan at different levels of planning to make it possible for this growth to take place in a rational manner and enhance

in a cumulative way the benefits conferred by each of the development programmes, i.e., employment must prove a blessing to the urban areas and not create additional housing shortage and further strain on the available services investment in industry must help the urban areas by increasing its productivity not by creating traffic bottlenecks, pollution of water and air and pressure on developed land.

It may, therefore, be concluded that integration of spatial and economic factors in the planning process is indispensable if the country wants to achieve the goals of planned development particularly in the context of limited resources available for urban and regional development.



Suggested Framework for Integration of Economic Planning and Spatial Planning

The imperatives for integration of economic and spatial factors in the planning process are obvious. This kind of integration on the one hand enhances the benefits arising from national planning through maximum inter and intra-sectoral coordination and acts as a corrective influence for likely imbalances or adverse effects that may arise due to differential emphases on sectoral programmes. Since spatial planning is based on the concept of decentralisation, it enables interlinking of plans of various units into an integrated whole. The integrated planning at various levels enables a better perception of the needs of local areas, makes better informed decision making possible, provides the people a better opportunity to participate in the decision making and helps in better exploitation of local area for improving productivity and production. Thus, an integrated economic and spatial planning would help in achievement of national development goals of economic growth and social justice in an accelerated and more effective manner. In order to achieve this integration, three things are needed :

1. Formulation of a national policy to provide for integrated economic and spatial planning.
2. Devising a suitable mechanism.
3. Ensuring the conditions for successful implementation of the above policy.

National Policy on Urban and Regional Development

The policy on urban and regional development should shift from an adhoc approach to a more integrated approach towards investment and physical planning. It should be guided by the principle of optimum utilisation of resources simultaneously maintaining ecological balance. Actually, this policy should be oriented positively towards enabling an orderly transition from a predominantly agricultural and rural society to an increasingly urban one. The tertiary sector has already surpassed the agriculture

sector in its contribution to the gross national product. These policies should also aim at achieving a balanced regional development in the shortest possible time. Similarly, the policy must shift its attention away from the distribution of city sizes. The distribution of city sizes is one of the most even in the world as are their respective rates of growth. It would be more desirable for the policy to focus on the needs of each region and city. The approach should, therefore, be more economic than physical. It must be recognised that the central problems are those of generating employment and incomes. It is here that the roles of different towns, cities and regions must be understood. Employment location policy needs to be coordinated with infrastructure investment policy in terms of location.⁶

Another guiding principles should be that a greater attention should be paid to creating those sub-structures in the economy which will bring about a rapid spread effect of the benefits of planned development as evenly as possible not through sectors alone but through space also. Spatial development must be conceived as a comprehensive system of inter-dependencies generating flows and counterflows that are the essence of economic growth and income convergence.

There is yet another principle that should guide the policy of urban and regional development is to strike a balance, through physical planning, between the renewable and non-renewable resources. This would require a long term view and projections to take rational decisions as to the extent to which a particular resource should be exploited and which of the resources need to be conserved. This brings to the fore the question of conservation of the environment and ecology which can be ensured only when physical and economic factors are integrated in the planning process. One of the very good examples in this case is that of energy which again has to be planned and developed in conformity with this principle. Then there are the problems of environmental pollution. It

needs no explanation that economic factors alone cannot guide these policies and programmes.

National Level Mechanism

As mentioned earlier, planning, in a multi-level framework, should be conceived as a two way process. It would be a 'top-down' process when we think of policy formulation and allocation of resources. But it a 'bottom up' process when these policies are to be translated into concrete programmes. The essential characteristics of the multi-level planning should also be underlined and it should be emphasised that planning from below implies that the development plans prepared at the lowest unit should be nested with the next higher unit and so on. The instruments for integration of economic and spatial factors in the planning process would, therefore, differ from level to level as also the extent and scope of integration. For example, at the national level, a National Physical Plan needs to be prepared to synchronise or integrated itself with the prepared to synchronise or integrate itself with the economic or sectoral development plan. Obviously, the national physical plan will be a broad outline which would show a realistic position of resources, renewable and non-renewable, and their distribution throughout the country. This will provide a sort of benchmark for sectoral planning. When the sectoral programmes are proposed and their spatial distribution is thought of, it will be more rational with the help of a physical framework which would at once show the most appropriate locations and regions for the proposed investments in different sectors. Thus, these development programmes would, as a matter of fact, be super-imposed over the original physical plan. This exercise would be repeated with every Annual plan and Five Year Plan and the changes in the development scenario would be recorded very clearly. It may, however, be mentioned here that, at the national level, it is neither feasible nor necessary to go into greater details since a number of sectors are planned at the State levels and it would not be desirable to encroach upon these sectoral activities. But the State Physical Plans to be prepared at the State level would complement the National Physical Plan and these would be complementary and supplementary exercises taken up simultaneously. It must be clear that this type of physical plan would be a valuable aid to the planners at the national level in having a more rational allocation of resources between different States and regions. It will also greatly help in taking effective measures for reducing inter-State disparities. It might ultimately help in evolving better criteria for allocation of resources between different States. In this method the allocation

of resources would be purely on a scientific basis and the political manoeuvrability would be reduced to the minimum.

The only urban rural projections made currently are demographic ones of the expected urban rural split of population and employment. The results are also used in the consumption sub-model because of the vastly differing urban/rural consumption patterns. However, the system of national accounts statistics as well as other information makes it difficult to do the spatial allocation of activities. Hence, the demographic projections are not linked with the other economy wide macro-economic projections of investment, income and consumption and the projections of sectoral economic activity.

From now on projections of urbanisation should be undertaken more systematically to integrate them with the economic modelling exercises. Such a procedure would also have important feedback effects in working out the urban infrastructure and housing implications of the planned sectoral activities along with the implied demand for building materials. Indeed, the importance of urbanisation projections is mainly to provide information for the required infrastructural investment at the right places at the right time-both rural and urban.

Initially, it may not be necessary to build in the urban/rural distinction into the main sectoral model. It would be adequate to perhaps, build a sub-model which uses the outputs of sectoral model to allocate activities between urban and rural areas and work out the infrastructure investment implications. These could be fed back into the main model at discretion. Over time, as the information system improves and experience with modelling builds up, urban/rural allocations should be integrated increasingly with the economy-wide allocation and consistency exercises.

The Perspective Planning Division (PPD) is responsible for intersectoral consistency and coordination as well as for long term projections for the country as a whole, disaggregated sectorally. As yet there is no urban/rural dichotomy built into the perspective planning model though more consideration is now being given to regional disaggregation. The other division that has considerable responsibility for urban related issues is the Transport Division which is responsible for urban transport policy as well.

The link between urban and industrial development can be articulated only if National and State plans articulate clearly the prospective pattern of industrial location. This is seldom the case. The location of

certain major projects is known but the bulk of the increase in industrial employment comes from smaller projects and private sector activity whose locational pattern is not analysed in the National or State Plans. An important reason for this is our lack of understanding of the determinants of location decisions. The Central and State Governments do have policy instruments which will influence locational decisions e.g. industrial licensing, various subsidy schemes, development of industrial areas/estates. However, the quantitative impact of these schemes is difficult to forecast. In any case, even if the prospective pattern of industrial location could be forecast or controlled, there are further difficulties in assessing the quantitative impact of industrial growth on immigration and urban growth.

The linkage that is really required in Central and State plans relates basically to public sector outlays and policies on industrial location and urban development. For instance, if the location policy seeks to shift industries away from metropolitan areas towards medium sized towns, there must be a corresponding orientation in urban (and regional) development strategy. Since most industrial and manufacturing towns thrive best with population 250,000 to 500,000. Therefore, towns under this category and those which are likely to enter this category by 1991 must receive top consideration. Or, if industrial location policy requires the development of many new growth centres, there must be a corresponding provision in the outlays for urban (and regional) development.⁷

With the aid of a physical plan at different levels it would be possible to plan for urban centres in their regional context. Thus, within a planning region there would be no allocation to towns because of their size but more because of their functions and needs. The physical and investment plans can then be dovetailed at the regional level and then fed into the State level plans which in turn can be coordinated with the national plans.

Recognition should be made of the metropolitan cities with regional and national functions. Again this should not merely refer to size. In the North East, for example, there will not be a million plus city for quite some time to come but there is probably a need for one city, Gauhati, for example, to perform the functions of providing linkages with the rest of the national urban system. Since these metropolitan cities are not narrowly wedded to their regions for their existence and functions, they need more specific city level planning exercises which, again, should be physical and investment plans linked with the State and national plans.

It has already been mentioned that the various services and infrastructure required for urban development come under the purview of a number of official and semi-official agencies. The coordination between these is a formidable problem. Moreover, the positive and comprehensive approach to urban development implies that it should be supportive of economic development in the country, state or the region be it in agriculture, extractive industries, manufacturing industry or in the tertiary sector. The provision of socio-economic infrastructure removes constraints to the growth of these sectors and in some cases promotes it. It is important to synchronise them in space and time so that they coincide with investments in industry, mining and commerce which provide permanent source of employment and these investments can be made fully productive through a physical plan.

The suggested mechanism of preparing national, State and regional physical plans would help in a rational allocation of resources for urban development unlike the present system. The State will be able to prepare a comprehensive urban and regional development plans to qualify for urban and related regional investment allocations given the overall cost standards. Thus, it would make possible to do-away with the present adhoc system of schemes.

Impact of Projects

As explained earlier, a great number of industrial and other investment decisions have a major bearing on urban development. It can, therefore, be suggested that just as projects over Rs. 10 crores are subject to appraisal project of over Rs. 50 crores or generating direct employment of over 1000 persons should also be required to file "Spatial Impact" or "Urban Impact" statements. These statements would detail the implied direct and indirect costs of urban infrastructure made necessary by these investments. These impact statements would include the most obvious implications of each project on employment (direct and indirect), basic services necessary for the implied employment, social amenities for the new settlements, communications networks, housing, water supply etc. Impact on existing settlements both urban and rural, and the relationship between the new settlements and existing ones would have to be considered also. Thus just as currently the materials power and other requirements worked out by the economy wide models get translated slowly into specific projects in our planning system, similarly the urbanisation related projections would be translated into specific investments (for new projects) by this mechanism.⁸

Institutional Arrangements

At present there are three main organisations dealing with the urban and regional aspects of planning at

the national level, i.e., the Planning Commission, Ministry of Urban Development and Town and Country Planning Organisation. These organisations need be restructured and their functions redefined to handle the above responsibilities. Before enacting any changes in the structure or functions of the above organisations, it must be reiterated that the basic objective of such an exercise should be to achieve in an effective manner the integration of the economic and spatial factors in the planning process. Therefore, first of all whatever technical capabilities are available in the Planning Commission should be pooled together and then the deficiencies which are observed with regard to new responsibilities should be made good by proper strengthening of the proposed set-up.

In the Planning Commission, the Housing and Urban Development Division is probably the smallest one and naturally it may not cope with the new functions, now being envisaged. There is another allied division called Multi-Level Planning Division in the Planning Commission which should be involved in urban and regional planning if spatial planning is recognised as a common denominator. It would, therefore, be advisable to merge these two divisions and redesignate it as Urban and Regional Planning Division.

This reinforced Urban and Regional Planning Division would be able to formulate appropriate policies for translating the national economic development programmes into spatial framework at various levels. Thus, it would be possible to integrate local level planning with district planning and state level planning and ultimately to national planning. This division will also be able to use the information provided by the perspective plan projections and would have a collaborative role in preparing the technical paper of the Planning Commission at the time of preparation of Five Year Plans. It would also appraise the projects which will submit the urban impact statements suggested to be prepared in the foregoing paragraph. In this context, the implications for future urbanisation would need to be translated into the necessary investments for housing and urban infrastructure. Similarly, the information from the urban impact statements would have to be built in and coordinated within an overall urban development plan resulting from State and regional urban development plans.

The proposed Urban and Regional Planning Division of the Planning Commission would have a multi-disciplinary team of experts in regional planning, urban economics and urban and rural sociology. The idea is that it should have basic capabilities in project formulation and appraisal, monitoring and

evaluation and perspective planning although it will take the assistance of other divisions in matter of higher level of expertise. It must, however, be self-sufficient in dealing with all aspects of urban and regional planning. This division with the expanded functions should be preferably headed by a regional/physical planner.

Ministry of Urban Development

As mentioned in the Task Force on Housing and Urban Development, the responsibility for more detailed urban planning and development should rest with the Ministry of Urban Development. But in the context of achieving the integration of economic and spatial factors in the planning process it will have to shoulder greater responsibilities. The Task Force has suggested that the Ministry should be redesignated as Ministry for Human Settlements. But, since we are talking of urban development in its regional or spatial context it still better or more appropriate designation would be Ministry of Urban and Regional Development. Further, this proposed ministry would have to be suitably strengthened if it has to play an effective role in overseeing urban and regional development in coordinating with other ministries which have major investments having major spatial implications. As suggested by the Task Force, while the Planning Commission would work out the main fiscal/investment implications and work them into the main plan the Ministry of Urban and Regional Development would work out the more detailed spatial implications and ensure that they are consistent with the investment decisions in the context of regional development.

The Ministry of Urban and Regional Development would also be responsible for working out the detailed financial implications of projected urbanisation in its regional context at different levels. In order to do this it will be necessary to have information on the cost of various standards of infrastructure and types in different regions. Furthermore, it would need information on existing infrastructure to be able to work out needs for the future. Such an ongoing exercise means technical strengthening of the Ministry.

For the above purposes, it will be necessary to induct physical planners in the Ministry of Urban and Regional Development. This would help in improving the technical content of planning in the annual and five year plans. The physical/spatial planning experts should be placed at least at the level of joint secretary so that they can field some influence.

Town & Country Planning Organisation

In view of the recommendations made in this report the Town and Country Planning Organisation would have to be suitably strengthened. It is obvious that TCPO will have its role in formulation of policies for evolving and issuing guidelines for planning methodologies for integrating economic and physical development. The functions envisaged for the Town and Country Planning Organisation are:

- (1) Preparation of a national physical plan and its continuous revision to have a clear picture of renewable and non-renewable resources and their spatial distribution in the country as a whole.
- (2) To indicate the priorities for urban and regional and industrial development on the basis of resource potentials and problems of development with a view to restoring or maintaining a balanced environment and ecology.
- (3) Investment planning for urban and regional development.
- (4) Formulation and Appraisal of urban development projects and providing guidance to various agencies involved in this task.
- (5) Monitoring and Evaluation of urban and regional development programmes.
- (6) Taking up applied research studies and developing sound methodologies for formulation of plans that would ensure integration of economic and spatial planning.
- (7) Providing feed back to professional training institutions in the field of urban and regional planning regarding the practical needs of a multi-disciplinary profession in order that there is coordination between theory and practice of spatial planning.
- (8) Developing and organising an urban and regional development management information system.
- (9) Suggesting legislative measures and their revision from time to time so that uniform urban and regional planning laws are enforced all over the country.

For making the TCPO more effective it would be necessary to raise its status and restructure it. There should be a Planner-in-chief who should be of the rank of Additional Secretary in the Government of India. Below him there should be three Chief Planners of the rank of joint secretary. These chief planners will be incharge of three separate wings. The first will look after the perspective planning wing. The perspective planning

wing will have direct liaison with the perspective planning division of the planning Commission and would attempt to integrate the urban perspective with the perspective plan exercises which are currently being taken up in the planning Commission. The person for this will have knowledge and expertise in techniques of perspective planning. The second chief Planner would be incharge of the national physical planning wing. This wing will be continuously engaged in preparation of a national physical plan and would translate the economic development programme in spatial terms and physical programming. The third chief planner would be incharge of monitoring and information systems. He would develop management information systems and computerised data base for spatial and urban planning and would monitor the progress of preparation physical plans at various levels and assist them in developing methodologies for integrated planning systems. He would also be incharge of monitoring of the big projects with a view to ensuring that the spatial/regional and urban development and housing components are being properly implemented as originally envisaged in the project.

As already suggested and also recommended by the Task Force on Planning for Housing and Urban development, each and every big project may be of industry or road transport or railways should be appraised from the view point of its likely 'urban' or 'spatial' impact in a broader perspective before the project is approved by the Public Investment Board. The work of appraisal will be under-taken by the Urban and Regional Planning Division which can also draw upon the expertise of other concerned divisions. The project would then be passed on the TCPO where the Chief Planner (monitoring) would look after the details.

This kind of arrangement, though necessary would not be sufficient to take care of the urban implications of development programmes in different sectors. As a matter of fact, there should be a permanent arrangement for constant appraisal. Thus, it is necessary that under the core sectors which have quite a substantial urban component and their development activities are likely to create a significant impact on urban and resultant regional situation, a continuous and regular exercise should be undertaken to find out that part of outlays which is going to be spent in urban areas soon as different sectoral plan/programmes are finalised. This information should then be passed over to the Urban and Regional Planning Division of the Planning Commission and the TCPO which will be a valuable input to the preparation of the National Physical Plan.

In order to achieve this end, the Government of India may think of creating physical planning cells in such ministries which have a significant urban component and whose programmes would have sufficient regional optimal implications. The head of this cell should be a physical planner of a suitable status so that he carries conviction with the senior officers and his opinion/advice is given due weightage.

This proposal may seem to have very large financial implications but this will be an economical proposition if its social cost benefit analysis is carried out. It would help the sectoral plans in achieving maximisation of benefits from its developmental programmes. When the physical component of the sectoral plan is prepared in advance, it will certainly economise the investments and would check any wastage. Above all, it will achieve inter and intra-sectoral coordination and synchronise all development activities temporally and physically.

Planning Mechanism at the State Level

In the revised scheme of things, it would be necessary to upgrade planning capabilities at the State level also. In this context the Town and Country Planning Departments in different States would have to be suitably strengthened or reoriented. The first task would be to create a mechanism through which the TCPD could work in close collaboration with the Planning Departments. This can be done by making this department an integral part of the State Planning Board/State Planning Commission. Similarly, the government departments of urban development are very weak and need to be strengthened wherever possible the State Planning Boards should have some sort of urban and regional planning division. But it may not be possible in many states. In such cases, the TCPD should be made to act as Urban and Regional Planning Division of Board to ensure linkages between investment decisions and local level planning and funding.

An arrangement similar to the one suggested earlier for the Centre may be recommended at the State level as well. Responsibility for the various aspects of urban and regional development which are currently fragmented in various departments in many States should be consolidated and brought under one Department of Urban and Regional Development. The State of Madhya Pradesh has attempted such consolidation where there is one Secretary for Housing, Local Self Government and Environment. The Department of Housing has under it a Housing Board. The Department of Environment is responsible for the Town and Country Planning Department, Development Authorities, Pollution Con-

trol Board and the State Slum Clearance Board; Department of Local Self Government works through the Director of Local Bodies and is responsible for all the municipal Corporations, municipalities and notified area committees. Different types of arrangements in different states can be worked out according to their own conditions. But it is important that machinery for coordination of all bodies concerned with these urban and regional functions be established. (9).

As suggested for the TCPO at the Central Level, the Town and Country Planning Departments (TCPDs) should be strengthened technically to perform the following functions :

- (i) The preparation of a State Physical Plan to have a clear picture of State's natural resources, renewable and non-renewable as also various land uses with a view to ensuring optimum utilisation of land and ensuring environmental and ecological balance.
- (ii) To ensure maximum utilisation of sectoral allocations and guide their rational distribution at regional, district and local levels.
- (iii) To indicate priorities & areas for development of industries and trade and commerce for a balanced development of the State.
- (iv) To assist the State Planning Board in preparing Development Plans for the State. This would mainly include the State wide investment allocations for different components of urban and regional infrastructure.
- (v) The preparation of Regional Development Plans for regions in the State above the district level.
- (vi) To assist in the preparation of integrated area development plans at the district level and in preparation of physical land use plans for smaller towns which do not have their own planning capabilities.
- (vii) Advising on physical plans, site and lay out plans prepared by development authorities and local bodies.
- (viii) Monitoring and evaluation of urban and regional development projects.
- (ix) The construction of a data base for each town or city, including demographic, social, economic, topographic and land use data.
- (x) Enforcement of standards, urban regulations etc.

In the above context, it would be necessary to strengthen the Town Planning Departments by raising their status which is generally very low in many states. It would also be necessary to induct physical planners in the Department of Urban and Regional Development at the Secretariat level. In order to draw out a more detailed framework we would discuss below the arrangements in the context of Uttar Pradesh where planning machinery in respect of economic or sectoral planning is fairly developed and where Town and Country Planning Department is also well established. The State of Uttar Pradesh has also started decentralised district planning from the year 1982-83. It needs no emphasis that the integration of economic and spatial factors in the district planning process are also of paramount importance. Therefore, the recommendations that would be made for the State of Uttar Pradesh would be generally valid for other States which may think of strengthening their planning machineries with respect of both the sectoral as well as spatial planning.

Suggested Mechanism for Uttar Pradesh

State Planning Commission in Uttar Pradesh is the organisation at the apex level which is responsible for formulation of Five Year and Annual Plans of the State. For introducing the spatial factors into the planning process and integrating them with the economic aspects it will be of primary importance that suitable changes are made in the composition of the State Planning Commission. It may be made clear that State Planning Commission in Uttar Pradesh has two wings. The first wing is the apex advisory body which has the Chief Minister as Chairman and Planning Secretary as its Secretary. It draws its members from political leaders, economists and other experts which are nominated by the Government. The lower wing is functional which does all the secretariate work and prepares the draft plan as per the stages already described. This plan is placed before the advisory wing for their expert opinion and finally for their approval.

As already mentioned there is a State Planning Institute which is the functional wing of the State Planning Commission. It does not have an urban development division or any assignment related to urban planning as such.

With a view to bringing the spatial planning into the mainstream of the State planning process, some changes in both the wings would be necessary. First of all, in the advisory wing, one expert each from the fields of regional/spatial planning and urban planning would have to be included as permanent members of the advisory body. Similarly, at the non-official

level one or two mayors of the metropolitan councils and at least one chairman of the municipal board should be nominated to the State Planning Commission on a permanent basis. The Chief Town and Country Planner of the State is already a member, but he should be given some active role in the set-up.

At the functional level, there should be an Urban and Regional Planning Division in the State Planning Commission also which will work in close co-ordination with the Urban Development Department and the Town and Country Planning Department of the State. This Division would be engaged in working out the trends of urbanisation in the State and will suggest programmes for regional planning and urban planning to be taken up by the Town and Country Planning Department. These plans will be worked out as a part of the overall State physical Plan which will again be a counterpart of the State Plan. The basic idea of preparing such plans is that these should be an integral part of the annual and five year plans of the State and will have the physical and financial phasing so that these get implemented.

As suggested at the Central level, at the State level also the urban and regional planning division would examine all the big projects, which go to the Public Investment Board, with a view to assessing their urban or spatial impact. In this case also all departments/agencies would file urban/spatial impact returns and these will go to the Public Investment Board after having been cleared by the Urban and Regional Planning Division. This division will also examine all sectoral programmes so as to ascertain that the sectoral programmes will not create or accentuate inter-regional disparities in the State.

Below the State level there will be similar kinds of mechanism at the regional levels and the Planning Department and Town and Country Planning Department would collaborate with each other in formulation of regional plans for various types of sub-regions within the Board economic regions. In most cases, this exercise would have to be taken at the divisional level. At divisional level, regional plans would be prepared in the overall framework of the State Plan. Since the Town and Country Planning Department already has its divisional units this work can be started forthwith. It would be necessary to constitute regional planning boards in these regions which will have autonomy in financial and decision making matters. The State Government would make certain allocations other than those given for the district for taking up developmental activities which benefit more than one district.

District Level Planning

As mentioned in Chapter 2, the Government of Uttar Pradesh has decided to allocate 30 per cent of the State Plan outlays for district sector schemes. This pool of outlays is distributed among different districts on the basis of a formula which takes into account the population and backwardness of the district. It has also been mentioned that, at present the urban sector is not at all represented in the district sector. The district planning also does not include the planning of even smaller towns. A spatially integrated plan is also not being prepared at the district level. As a matter of fact, it may not be possible to earmark funds for urban development out of district funds but some taken amount should be made available for preparation of plans for the small towns which are the potential growth centres in the rural areas. A number of recommendations have been made by the Working Group on District Planning appointed by the Planning Commission (10) which will go a long way in integrated economic and spatial planning at the district level. These should therefore, be implemented.

However, before we reproduce these recommendations here, it will be necessary to suggest some changes in the organisational set up for district planning. Although, the Government intends to handover the planning function to Zila Parishad in the long run which has the Chairman Municipal Boards as members to present their case, the present agency called District Planning and Implementation Committee (called as District Planning and Development council in some other States) does not have any representative of urban local bodies. Therefore till such time as the planning function is not transferred to Zila Parishad the District Planning Committee should include one or two representatives of the local bodies. They will be official representatives only because the local bodies in Uttar Pradesh continue to be under supersession.

It may also be mentioned here that the exercise of preparation of State Physical Plan can help the State in more rational distribution of plan resources between regions and districts and in this sense spatial planning should be given a due place in the exercise of allocation or outlays between different districts.

It has been suggested by the Working Group on District Planning that the spatial planning exercise at the district level would take into consideration the physical resources, land uses and all human settlements in a district right from the smallest settlement to the sprawling cities. It will also be concerned

with all types of flows of people, resources communications and goods and services which are relevant for planning the levels of economic and social activities in the area. In this context, the district spatial plan would relate physical development with economic development and would achieve inter-sectoral coordination.

The spatial planning exercise at the district level assumes a greater significance in the context that most of the sectoral programmes now being implemented here require locational decisions. It would not be an exaggeration if we say that the district planning exercise is largely a spatial planning exercise because in this area the district planner has a greater degree of freedom than in other aspects of planning. It may be added that for provision of socio-economic infrastructure and the items of social consumption covered under the MNP and for delivery of inputs under the schemes of IRDP locations are required to be identified. Experience shows that these programmes will be more effective and the resources spent on these will be optimally utilised if their locations are carefully selected.

Spatial planning as a part of district planning has, therefore, three important functions; it must guide the development programmes through a location blueprint, while doing so it must ensure that the objective of distributive justice in respect of access to consumption and production facilities for the weaker sections is realised and it must bring about rural-urban integration and continuum. It is essential that all these functions are performed without causing any adverse effects on the ecology of the area.

An important task to be performed by spatial planning will be to identify requirements of support infrastructure to improve the quality of life and to promote economic activities such that desired levels can be attained. Another important task of spatial planning will be to identify and correct imbalances in availability of infrastructural facilities in a district as a whole or in any part of it. In this sense spatial planning is concerned with identification of areas where additional or totally new infrastructure will have to be created so that the gap between available requirement can be progressively narrowed down.(11)

Block Level

As mentioned earlier, a community development block is a coordination link between village planning and district planning. Quite often a district may be too large in area or too diverse in topographical, economic and socio-cultural features to serve as a

single spatial planning unit. In this case the block can be a convenient unit of spatial planning and a district spatial plan may be prepared by dovetailing the block spatial plans. Moreover, in a block it is possible to identify smaller sub-regions or micro-regions on the basis of homogeneity and contiguity which will provide a sound base for sectoral economic planning. For example, it may be possible to identify micro-regions on the similarity of cropping patterns or a cluster of villages which have shown similar trend growth rates either of the major economic activities or of population or of both. In this manner, the spatial planning will help the district planning authorities to identify within a district the areas of growth, stagnation each with its specific problems and policy requirements.

From the view point of social justice another criteria for delineation of micro-regions can be the special concentration of a particular social group. For example, areas of high concentration of Scheduled Tribes are already considered for preparation of integrated tribal development projects. Similarly, it may be possible to identify areas with relatively high concentration of Scheduled Caste population or of landless agricultural labourers so as to qualify to be considered as planning sub-regions for purposes of special attention under various programmes such as special component plan and the integrated rural development programme.(12)

Spatial planning exercise of the above sort would in an in-depth study of inter-block disparities within the district for major items of the infrastructure like agriculture, irrigation electricity, roads, health, drinking water and education. This analysis would facilitate allocation of infrastructure amongst blocks. Thus, the blocks with the least percentage of existing provision in regard to say a particular item of infrastructure could be given first priority. It may be mentioned here that spatial planning exercise at the district and block levels helps not only in maximisation of benefits from sectoral (economic) planning but also safeguards against wastages, overlapping and duplication. At these levels, many a times, a number of locational decisions are taken on the basis of political and personal pressures which do not take into consideration the scientific criterion. The spatial planning exercise helps in minimising such pressures and this ensures optimum utilisation of services by locating them at most appropriate places.

A very important function of spatial planning at the district and sub-district levels, is that it helps in evolving a settlement pattern that would be suitable

for an optimal distribution/dispersal of socio-economic activities in a long-term perspective for an accelerated development of the district as a whole. In this process we are able to identify existing and potential growth centres which either have an urban character already or are likely to grow as urban centres. These small towns which should be taken into the orbit of district planning need immediate attention at least in matter of regulation and control otherwise after some time these will pose problems of unplanned growth and lopsided development which at a later stage becomes insurmountable. It is here that the intervention of Government is necessary. The least would be to prepare an outline plan for future development of such towns by clearly demarcating various land uses and the direction of future growth.

This job for the time being will have to be undertaken by the district planning team whose constitution will be discussed at a later stage since these towns have neither resources nor expertise for preparing a master plan or physical plan.

In addition to the planning input it would also be necessary to allocate/divert some resources to these towns for providing basic minimum facilities out of the NREP, RLEGP funds. The planning for and construction of infrastructural facilities should be financed through the above funds by treating them as part of rural areas. Otherwise, these towns which are important from the view point of future area development receive step motherly treatment as they are treated neither rural nor urban.

Need for a Graduated Approach

The Working Group on District planning has suggested a methodology for spatial planning which needs some technical skills which have to be built up in the district planning team over a period of time. Under the Centre's scheme of strengthening of planning machinery at the district level the appointment of one geographer and cartographer has been suggested. These officers with some training would be able to undertake the exercise of district spatial planning. Since the district planning team is going to play an increasingly important function for an accelerated development of the district, it is necessary to have an expert in spatial planning at the district level. It is, therefore, suggested that the State Government should avail of the offer of the Central Planning Commission of providing financial assistance to appoint such an expert.(13)

Recognising the desirability of ensuring rural-urban area continuum at the district level the proposals of the spatial plan regarding expansion of functions

in the study area should take into account the requirements of small towns such as those having Nagar Panchayats and Notified Area Committees.

One of the major tasks to be accomplished through the expertise of spatial planning would be to design a pattern of settlements for human activities. This pattern should be able to fulfil not only the present needs but also the projected needs in a long-term perspective already evolved for the development of the district. The settlement pattern so devised becomes an instrument of development of the district. In this pattern, there is no distinction between a rural and urban settlement and, therefore, development of urban settlement should be treated as integral part of the district planning exercise.

It may be possible to think of devising a pattern of which the discretionary fund allocated by the govt. to the district may be required to be matched equally or in some proportion by locally raised resources at the initiative of district planning agencies. For this, district will have to be given powers for raising their own resources by authorising them to collect their own resources from taxes etc.

The smaller towns should be included in the gamut of planning for NREP, RLEGP etc. so that minimum needs and community facilities which are ultimately used by the rural inhabitants are developed and these towns become active partners in rural development and district planning.

"The working group on District Planning has stated lastly we refer to an aspect which is relatively a neglected dimension in district planning viz., rural-urban integration. The district plans so far have been conceived as rural plans only. With the introduction of the Integrated Rural Development Programme and the new orientation in planning the need to integrate the rural activities particularly with the small and medium sized towns has become a crucial issue. The small and medium sized towns have to function as focal points for agricultural activities and for the provision of higher order services and amenities such as marketing facilities, banking services ware-housing repair workshop, recreation and the like."

The G. V. K. Rao Committee has also recommended that in order to ensure that effective rural-urban linkages are established in the process of district development, the chairman of the Municipalities/Urban local bodies Corporations should be made members of Zila Parishads/District Development Councils which is already provided in Zila Parishad Act of U.P. Similarly the chief Executive Officers of these bodies should be represented in the appropriate official district development bodies like the district

planning team/committee, District Rural Development Agency, etc. (14)

The urban centres cannot be ignored in the district planning's new set-up or in anti-poverty programmes as they provide infrastructural facilities for ensuring the forward and backward linkages for IRDP and other anti-poverty programmes. They should be given some assistance out of the funds for infrastructure for development under IRDP so that they can play their role effectively in TRYSEM or other supportive programmes.

The working group has therefore recommended that towns with a population of less than 10,000 should be treated as an integral part of the district area for purposes of overall planning and implementation of development programmes in the district. With such integration, it is also necessary to ensure that the funds provided at the State level for urban development sector are duly disaggregated on proportional basis for meeting the cost of urban services of urban centres thus brought into the rural framework of district plan.

However, in the case of larger cities and metropolitan areas it would be better to treat them as separate entities for planning and development except for some limited coordination of development activities in peripheral areas involving extension of services and the like. Such coordination could be brought about by providing for mutual representation in the district as well as urban planning bodies as has been done in Maharashtra and Gujarat. The point to be noted here is that limited coordination through mutual representation will meet the needs of rural-urban integration in the case of large towns and cities; On the other hand, in the context of smaller towns, closer linking in planning allocation of resources and local administration will be needed. This is best accomplished through spatial planning which seeks to provide the services of all kinds necessary for economic growth in their appropriate location.

Small towns and urban local bodies are left out of the scope of the programme like IRDP with the result that poorer classes belonging to the groups of marginal farmers, agricultural labourers, small artisans and other categories of urban poor etc. are denied the benefits of subsidy available to their brethren living in adjoining villages. On the other hand, they derive very little benefit from the urban local bodies. Taking note of this Gujarat has already extended the scheme of incentive grant to benefit urban areas. Since this working group has recommended that small towns of more than 10,000 population should be treated as an integral part of the District area, it is necessary to extend the benefits available to the rural poor also to the urban poor.

Another aspect of rural urban integration relates to the emergence of a number of industrial township and mining complexes, large irrigation projects and Hydel and Thermal Projects in the midst of rural areas. The spun-off effects of such large projects generate a tremendous potential for development. The National Committee on the Development of Backward Areas has studied this problem with reference to a specific project, viz., Project in Orissa. The case-study has revealed the various aspects of the planning and implementation process that are important for tying up the potential of new growth centres with the development of their rural hinterlands.

In the case of such projects large employment potential both direct and indirect exists. Therefore, besides the usual project plan, a secondary plan for training and employment and its absorption has also to be made. The NCDBA report has recommended that the responsibility for doing this must rest with the District Planning unit working in association with the project.

The Working Group, while endorsing the recommendations of the NCDBA, has made the following recommendations for bringing about coordination and integration of the plan of urban local bodies with the district plan.

- (i) Representation should be given to the urban local bodies in the District Planning Council or the agency entrusted with the formulation of district plan.
- (ii) Urban areas having population of more than 10,000 should be treated as an integral part of rural areas and planning development for these areas should form part of the district plan. They should be represented in Panchayat Samities.
- (iii) Urban local bodies having a population of over 10,000 should be asked to prepare Annual and Five Year Plans within the framework of State Plan.
- (iv) In the case of urban areas which will serve as growth centres, the linkages between the needs of these areas and plans for meeting their needs by conscious efforts taken up in the adjoining rural area should be clearly spelt out. (15)

City/Town Level

Spatial or strictly speaking physical planning is in vogue at the local city/town level since the Third Five Year Plan. These master plans are prepared

in accordance with the provisions of a certain legislation. Therefore, they are automatically implemented so far as their regulatory aspect is concerned. But, the other function, which is more important, that of positive development envisaged in a master plan is never implemented. As a matter of fact, the present nature of master plan is such that it is not capable of being implemented. Generally, these are prepared without taking into consideration the resources position nor do they indicate the financial implications of their implementation. These do not provide any phasing from the view-point of fiscal programming. At best they indicate various land uses and a future direction of growth of the city. Since the plans do not contain any details or phasing of yearly and five yearly physical and financial programmes and targets, these are not at all integrated with the State Plans.

In order to restructure this process, the municipal bodies should be strengthened for taking care of the planning needs of each town. Once the regional dimensions are spelt out by the State Level planning body. It will be possible for the local bodies in line at the local level should rest within the local body. It will be possible for the local bodies in many of the larger cities to develop their own planning capability in terms of qualified staff. Now that there are 216 class I cities already and that this number is expected to increase to over 300 by 1991, a large proportion of the urban population will be covered by these local bodies. It will, however, be difficult for most of the local authorities in the small and medium towns to afford their own planning staff. It is recommended that the newly revamped and strengthened State level TCPDs should develop special wings which would act as technical consultants for the local planning needs of the smaller towns.

It is necessary to point out here that the old methodology of preparing a master plan should be given up. Instead, the town planners should evolve such methodologies as would help in preparation of master plans within the shortest possible time. Within the framework of a long-term master plan city development plans should be prepared which will be in accordance with the State Plan framework. These city development plans would have yearly and five yearly physical and financial phasing and targets.

It is necessary to mobilise resources for urban development other than government resources. As a matter of fact each city should be assisted to become self-reliant in the matter of provision of basic services and amenities. For this, the institutional

finance is the only answer and the Planning Commission has already initiated action for the establishment of a National Housing Bank and National Urban Infrastructure Development Finance Corporation which are expected to fulfil this long felt need. (16)

The local bodies should be assisted in preparing viable projects in every sector of urban development so that the proposed bank should advance loans. The city government should for this purpose be well-equipped in preparation of viable urban projects which may besides housing and commercial projects should also think of integrated urban development projects which would be viable in the sense that the investments on such projects is returned to the financial institution over a definite period of time.

It will also be necessary to strengthen the local bodies in fiscal terms and, therefore, there should be more systematic devolution of funds to local authorities. There must be greater coordination between development and physical planning at the local level. (17)

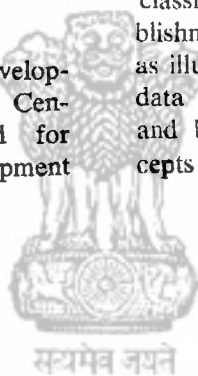
Developing Planning Capabilities

The Task Force on Housing and Urban Development has given a very good suggestion that a Centrally Sponsored Scheme should be launched for funding the development of new urban development

planning capability such that the integration of physical, investment and financial planning as envisaged can take place. The scheme would cover training and institutional needs arising from this re-orientation at both the central and state levels. It is further suggested that the local bodies, which cannot afford to appoint a town planner but is needed genuinely, should be provided some assistance and incentive to appoint such an expert.

Developing Information Systems

Urban development planning within the framework of overall development planning in India would necessitate the setting up of an Urban Information system (URBIS). The system, may start its work by compiling systematically the data available with the central level data collection/compilation agencies like the Census, Central Statistical Organisation (CSO) etc. There are serious problems of inter-sectoral as well as inter-state comparability with regard to a segment of this information base. The data on workforce, its distribution among various industrial categories (at the two digit level of NIC classification), the distribution of industrial establishments among these categories, may be mentioned as illustrations. URBIS would have to retabulate the data on the basis of highly disaggregated information and by using comparable definitions of various concepts at different points of time. (18)



Training, Research and Orientation

It has been pinpointed at several places in this report that a number of constraints to the integration of economic and physical factors in the planning process have continued to exist because of lack of realisation of the important role that can be played by spatial/physical planning in accelerating economic development. The general administrators, economists and social scientists let alone the political bosses have tended to assign very little importance to the discipline of spatial planning with the result that many locational decisions are taken in an irrational manner or due to political compulsions ignoring the long-term and wider regional implications. On the other hand, the physical or spatial/regional planners have continued to confine themselves to the rigid boundaries of their disciplines and they have been largely overwhelmed with physical approach to socio-economic development. Both these approaches need to be brought closer and an integrated spatial (physical) economic and social and financial approach should be evolved.

It would imply an interaction of a number of disciplines to evolve such a multi-disciplinary approach. The important disciplines of economics, sociology, management, public administration etc. besides elementary techniques of spatial planning should be included in the training curriculum. The training needs would have to be assessed for each section of trainees to be drawn both from official as well as non-official functionaries.

For a broader understanding of the integrated approach to economic and spatial planning the training would have to be organised at various levels catering to the needs of policy makers, administrators, executives in public and private sectors and functionaries working in different departments at those levels as also the non-officials involved in decision making at that level. Special emphasis is being laid here on the training and orientation of the non-officials because, firstly planning is essentially a poli-

tical process, secondly, in a democratic set-up the role of non-officials is very important in all aspects of planning and finally many distortions in locational planning are created due to their rigid attitudes. A very good suggestion has been made by the GVK Rao Committee (19) that joint training programmes should be organised for the official and non-official development functionaries besides special programmes for the officials. This kind of joint training would be very helpful in formation of positive and helping attitudes towards each other and remove a number of inhibitions which place a hindrance in building up cordial and cooperative relationship between the two. Thus, it will be useful to organise such courses for the chairman municipal boards and their executive officers. Similarly, courses for the Chairman Zila Parishad and their chief executive officers, ministers and their secretaries and members of parliament and members of legislatures alongwith district officers should be organised.

The work of designing and organising training programmes need to be done carefully and meticulously because it will be very crucial in facilitating the formation of right kinds of attitudes and a defective training programme may create negative attitudes. It is needless to say that these training programmes would not be in the form of conventional lectures, they would be largely participatory in nature and would focus on maximum participation of trainees in the discussions. More of these will be in the shape of training workshops of short duration which should be structured keeping in view the training needs about the goals and objectives of integrated economic and spatial planning.

For organising the above courses, training packages, modules and capsules will have to be designed for each level of participants and then for the combined groups of participants. Since it will be a specialised job, it would be necessary to create a special division for developing and coordinating

training programmes in these areas. The division may either be established in the Ministry of Urban and Regional Development or the Planning Commission alongwith the revitalised Urban and Regional Planning Division. But the basic necessity would be to achieve effective coordination with the Directorate of Training in the Department of Personnel and Administrative Reforms so that the discipline of urban and regional planning can be dovetailed with their current/training activity. This coordination and collaboration would also result in earmarking of sufficient funds for training as also applied research. Although, separate funds would be needed for urban research which should be mobilised through different agencies like U.G.C., ICSSR, Planning Commission etc. Sufficient allocation should also be made in the budget of the Ministry of Urban and Regional Development or the Planning Commission for this purpose keeping in view a 15 years perspective for the needs of such training. (20)

The job of developing training packages, modules and capsules should be got done through specialists from different disciplines and before launching the training programme these packages should be pre-tested.

For organising training programmes on the above lines a network of training institutions would have to be established. While it would be necessary to utilise the existing institutions such as National Institute of Urban Affairs and the Administrative Training Institutes in different States where the requisite faculty will have to be provided to include the relevant content of training in the foundation courses for the officers of central and State services recruited for development administration. The National Institute of Urban Affairs and Delhi School of Planning, especially its Centre for Rural Development can be restructured and strengthened for this purpose. These may act as nodal training institution, to train the trainers as in a multi-level planning framework it would also be necessary at a subsequent stage to establish training institutions at the State levels and may be at regional levels. The broad areas in which training is required have been indicated below :—

- (1) Goals and objectives of urban and regional development in the context of national planning, economic development and social justice etc.
- (2) Techniques of integrated spatial, economic and social planning.
- (3) Participatory planning, monitoring and evaluation for regional development.

- (4) Land management and land pricing.
- (5) Transportation Planning.
- (6) Municipal Organisation, administration and management.
- (7) Project formulation and appraisal techniques with special reference to urban and regional development.
- (8) Finances for local bodies and mobilisation of local resources housing, and
- (9) Coordinated planning of basic service.
- (10) Rural urban integration.
- (11) Social Planning for the urban poor.
- (12) Methods of preparing regional capital budgeting and accounting.
- (13) Application of input—Output techniques to regional and metropolitan problems, industrial complex analysis and linear programming.
- (14) Programming techniques in social sectors.

It may, however be mentioned that the above are broad areas and are only illustrative. The detailed packages, modules will have to be worked out by a group of multi-disciplinary experts for different categories of trainees as already stated.

Research in Urban and Regional Planning

The need for basic and applied research for introducing innovations in various aspects and facets of urban and regional planning can hardly be over-emphasised. It is well-known that the techniques for integration of the different aspects of economic and spatial planning are not yet fully developed. It should also be noted that better information on the above aspects is now available on economic, demographic social and other aspects of development and it is necessary to improve methods of analysing it and also using the techniques of social accounting input-output and programming in the areas of urban and regional planning. First of all the methodologies would have to be evolved for preparation of plans that will ensure integration of economic and spatial factors at various levels. Applied research will need to be conducted for evolving the techniques which have been suggested above. Moreover, the techniques would have to be upgraded and revised according to the feedback received from field practitioners. A number of case-studies and pilot studies would also need to be taken up to revalidate the methodologies pertinent to the field.

Another important constituent of the research activity would be to prepare planning manuals for different areal units which would serve as guides

for planners in the field. The job of applied research should naturally be entrusted to the training institutions since training research and planner's implementation are complementary and supplementary activities. Therefore, research and training institutions should make use of the practical experience and the lessons from actual implementation of development projects and plans as the basis for education and scientific investigation.

It may also be added that in addition to these institutions the research activity should be expanded through the departments of geography and regional planning or economics and sociology at selected universities to assist in developing and constantly improving multi-disciplinary planning methodologies.

It would be the function of the Training Division established for urban and regional planning to assess the training needs and decide research areas and then pass them on to the National Institute of Urban Affairs, School of Planning and Architecture.

The Institute of Town Planners although a non-government organisation may also take up research and training programmes at various places in the country with a view to upgrading the professional capabilities in the field of urban and regional planning.

Planning Education

The restructuring of the planning process to achieve integration of spatial and economic factors would require quite a large number of professional planners. We need, therefore, to augment as also to reorient the planning education.

One issue of planning education which has received very little attention in our country is whether the education of planners should be at the under-graduate level or at the post-graduate level. Planning education in India is carried out at the post-graduate level, which originated in the West. It was then argued that planning is such a complex subject that those who study it must come to it with a high level of maturity and experience provided by study for an under-graduate degree in another discipline like Architecture or Civil Engineering. Furthermore, since planning draws upon several disciplines, a thorough grounding in one or a number of these would provide a suitable background for the study of planning, since the student can bring to bear on his studies the methods and fundings of his "parent" discipline. On the other hand, students who come to planning from analytical disciplines of social sciences, take sometime to come to grips with such an action-oriented, prescriptive discipline as planning. Moreover, because they have already spent 4 to

5 years doing one Degree, the time devoted to post-graduate training in planning (just three semesters) is necessarily too short for them to have little or more than a superficial acquaintance of the knowledge necessary for planning action.

Under-graduate planning education will give the students a wide general background in planning, to enable him to participate in the solution of problems. This general planning education would later be strengthened by specialisation in one or more areas of planning. Such a student will have a synoptic view of planning process when, later he specialises in a subject such as regional planning, transportation planning, housing and community development and so on.

Under-graduate programme is preferable for our Country. Apart from the fact it generally takes a shorter time to prepare a person for the planning profession, the fact that the initial university education is in planning would make the identification of potentially good planners for advance training and specialisation in the planning field easier. (20)

Similarly, it is also necessary that existing town planning courses in the planning schools should be made broader as, for example, they have been made at Ahmedabad School of Planning. Moreover, the universities may be requested to introduce post graduate courses in urban and regional economics, urban geography, economic geography, regional planning etc. These students would be better equipped to receive advanced specialised education in urban and regional planning.

This matter needs to be taken up by the Ministry of Urban Development in collaboration with the Ministry of Education so that the above needs could be met and sufficient number of planners are available to serve in the field. Moreover, the restructuring of the planning education would also help in creating an environment in which the development planning is conceived in a comprehensive sense and not in the restricted one.

The recommendation made by the Task Force for initiating a centrally sponsored scheme of building up planning capabilities is very relevant in this context and effective implementation of this scheme will go a long way in enhancing planning capabilities. The role of Institute of Town Planners in this regard also needs to be re-emphasised so that they can be more effectively involved in carrying out their present function of conducting the Associateship Examination. This will again require rethinking to make the profession more broad-based and integrate it with the discipline of economic planning.

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